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The Demand and Price Situation for Forest Products

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THE DEMAND AND PRICE SITUATION FOR FOREST PRODUCTS—1966

by

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Forest Service

(Special acknowledgment is made to Herbert B. Wagner, Producer Associations Division, Agricultural Stabilization and Conservation Service, for his contribution of the section on Naval Stores)

PREFACE

This report presents information on current trends in demand for and prices of forest products in the United States. Although national trends are dealt with for the most part, some material is given for regions and States.

The 1965 and 1966 statistics in this report are based on information available at the end of August 1966. These data should be regarded as general indicators of trends and not as final figures fully comparable with statistics for earlier years.

Mention of names of commercial firms does not constitute an endorsement by the U.S. Department of Agriculture, Forest Service

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CONTENTS

Page

HIGHLIGHTS 1

GENERAL ECONOMIC TRENDS 4
- Economic activity rising in 1966—prices also up 4
- Timber product markets show varying trends—industrial production up but construction down 4
- Residential construction down sharply and falling 5
- Interest rates rising and mortgage money scarce 6

TIMBER PRODUCTION, PRICES, TRADE, AND CONSUMPTION 7
- Domestic timber production up 3 percent in 1966 7
- Stumpage prices continue upward trend 7
- Log prices moving up in 1966—continuing established trend for most species 9
- Wage rates rising in logging and timber-based industries—generally in line with other industries 10
- Net imports of timber products and log exports up sharply 10
- Consumption of industrial roundwood to increase 4 percent in 1966—reaches a high of 12.3 billion cubic feet 12

LUMBER PRODUCTION, PRICES, TRADE, AND CONSUMPTION 13
- Lumber production up slightly in 1966—hardwoods account for increase 13
- Regional lumber production showing varying trends in 1966 13
- 1966 lumber production in the West estimated at 21.5 billion board feet—slightly below 1965 14
- Lumber production up 2 percent in the South in 1966 14
- 1966 lumber production in the North about the same as in 1965 15
- Small mills have been leaving the lumber industry—large mills cutting bigger proportion of output 15
- Lumber prices declining after sharp rise in early 1966 16
- Lumber imports and exports up in 1966 18
- Lumber consumption estimated at 41.6 billion board feet in 1966—slightly above 1965 19

PULPWOOD PRODUCTION, PRICES, TRADE, AND CONSUMPTION 21
- Pulpwood production expected to reach a high of 55 million cords in 1966—10 percent above 1965 21
- Pulpwood production in the South estimated at 33.8 million cords in 1966—up 10 percent from 1965 22
- 1966 pulpwood cut in West estimated at 12.5 million cords—11 percent higher than in 1965 22
- Pulpwood output in the North expected to be 8.7 million cords—0.9 million cords higher than in 1965 23
- Pulpwood prices rose in 1965 and fragmentary data indicate further increases in 1966 23
- Pulpwood imports rise in 1966—exports up sharply 23
- Trade in wood pulp, paper, and board rising fast in 1966 24
- Pulpwood consumption in U.S. mills estimated at 55.8 million cords in 1966—5.1 million cords higher than in 1965 and a new record 25
- Total pulpwood consumption in U.S. estimated at 66.8 million cords in 1966—11 percent above 1965 26

Page

PLYWOOD AND VENEER LOG PRODUCTION, PRICES, TRADE, AND CONSUMPTION 27
- Softwood plywood production up 6 percent in 1966—hardwood plywood shows 9 percent rise 27
- Plywood prices in July near 1965 levels 27
- No significant trade in softwood plywood—hardwood plywood and veneer imports continue to rise 27
- Softwood plywood consumption to increase 6 percent in 1966—significantly below the average rate of increase in the last decade 28
- Hardwood plywood consumption up 13 percent in 1966—a continuation of recent trend 29
- Softwood veneer log production expected to be 5.7 billion board feet in 1966—6 percent above 1965 29
- Hardwood veneer log production estimated at 925 million board feet in 1966—6 percent above 1965 30
- Veneer log prices rising 31

PRODUCTION AND PRICES OF MISCELLANEOUS TIMBER PRODUCTS 32
- Production of miscellaneous industrial timber products stable 32
- Fuelwood production continues slow decline 32
- Scattered price information available for miscellaneous timber products 32

NAVAL STORES PRODUCTION, PRICES, TRADE, AND CONSUMPTION 34
- Domestic production declines 34
- Rosin prices more competitive, turpentine steady 34
- Rosin exports climb as European output falls 35
- Rosin consumption rising slowly 36
- Turpentine utilization down from 1964–65 levels but continues high 36
- Longterm upward trend in U.S. rosin stocks is reversed 37
- Stocks of sulfate turpentine increase 37

LITERATURE CITED 38

APPENDIX 42

LIST OF TABLES

Table No.		*Page*
1	Measures of economic growth, population, and prices, 1950–66	42
2	Production, net imports, and apparent consumption of timber products, by major product, 1950–66	43
3	Average stumpage prices for sawtimber sold from National Forests, by selected species, 1950–66	44
4	Volume and value of sawtimber stumpage sold from National Forests, by selected species and region, 1965	45
5	Saw log prices for selected species sold in Illinois, 1953–66	46
6	Saw log prices for selected species sold in Louisiana, 1956–66	47
7	Log prices for Douglas-fir sold in District 4, Washington, 1959–66	47
8	Average hourly earnings in timber-based industries and all manufacturing in the United States and selected States, 1950–65	48
9	United States imports and exports of logs, by softwoods and hardwoods, 1950–65	50
10	Per capita consumption of timber products, by major product, 1950–66	50
11	Lumber production, imports, exports, and consumption, by softwoods and hardwoods, 1950–66	51
12	Lumber production, by section and by softwoods and hardwoods, 1950–66	51
13	Lumber production and number of establishments, by mill size class and section, selected years 1947–63	52
14	Wholesale price indexes for lumber, plywood, and building board, 1950–66	54
15	Wholesale price indexes for all commodities, and selected materials used in construction and shipping, 1950–66	55
16	United States imports of lumber, by softwoods and hardwoods and country of origin, 1950–65	55
17	United States exports of lumber, by softwoods and hardwoods and country of destination, 1950–65	56
18	Lumber production in Canada, by softwoods and hardwoods, and region, 1950–65	56
19	Consumption of selected timber products and other materials used in construction, manufacturing, and shipping, 1950–65	57
20	Pulpwood consumption, production, net imports, and the equivalent wood volumes of the net imports of paper, board, and wood pulp, 1950–66	58
21	Pulpwood production, by section and by softwoods and hardwoods, 1950–66	58
22	Pulpwood prices at local delivery points, 1950–66	59
23	United States imports and exports of plywood, by softwoods and hardwoods, 1950–65	59
24	United States imports and exports of veneer, by kind, 1950–65	60
25	United States imports of hardwood plywood, by country of origin, 1950–65	60
26	United States imports of hardwood veneer, by country of origin, 1950–65	61
27	Production of veneer logs, by softwoods and hardwoods, 1951–66	61
28	Rosin and turpentine: Supplies, requirements, and prices, for crop year beginning April 1, 1958–66	62
29	Production of rosin and turpentine by specified countries, average 1956–60 and annually 1961–66	64
30	Rosin and turpentine: Foreign trade by leading exporting countries, average 1956–60 and annually 1961–65	65

HIGHLIGHTS

Economic activity

During the first half of 1966 there were varying trends in the sectors of the economy that are important markets for timber products. The Federal Reserve Board index of industrial production in July was 157.4 (seasonally adjusted annual rate 1957–59=100)—substantially higher than the January index of 150.2 and the 1965 level of 143.3. From 1965 to July 1966 the index of manufacturing output rose from 144.9 to 159.7 and that of furniture and fixtures from 157.4 to 169.9. The output of containers, another major end use of timber products and a leading indicator of economic trends, increased from 136.6 to 144.4.

Total expenditures for new construction, the Nation's largest market for timber products, was $63.7 billion (3-month average of seasonally adjusted annual rate in 1957–59 dollars) in the second quarter. This was slightly above 1965 expenditures of $62.1 billion, but about $2.9 billion under the first-quarter 1966 rate of $66.6 billion.

During May, June, and July of 1966 the seasonally adjusted annual rate of dwelling unit starts averaged 1.2 million, about 0.5 million units below the January rate and 0.3 million under the 1.5 million units started in 1965. Permits issued for future construction in July 1966 were 3 percent under the June level and 26 percent below starts in 1965—with indications of a further fall.

All timber products

Timber production from domestic forests in 1966 is estimated at 11.7 billion cubic feet. This is 3 percent above output in 1965 and 11 percent more than the annual average in the 1956–65 decade.

Stumpage prices for most species of timber sold from the National Forests have been moving up since 1962, and this trend continued in the first two quarters of 1966. Stumpage prices for most species are now above the previous highs reached in the mid-1950's.

Log prices have been following the upward trend in stumpage prices. The rise has been largest for hardwoods and presumably reflects in part growing scarcities of the kinds and qualities of logs in demand by industry.

Trade statistics for the first half of 1966 indicate that total net imports of timber products, including the roundwood equivalent of lumber, plywood, veneer, wood pulp, and paper and board, will be about 1.9 billion cubic feet. This is about 11 percent above 1965 imports, and the high in a trend that has been rising fairly rapidly in the last two decades.

Between 1959 and 1965 log exports rose from 0.2 billion board feet to 1.2 billion board feet, a sixfold increase. Trends in shipments during the first half of 1966 indicate that the total for the year may be about 1.3 billion board feet.

Consumption of industrial roundwood, i.e., saw logs, veneer logs, pulpwood, and all other products except fuelwood, is expected to be about 12.3 billion cubic feet in 1966. This is 4 percent above the 1965 level and a high in the consumption of industrial timber products.

The total consumption of roundwood in 1966—industrial wood plus fuelwood—is estimated at 13.4 billion cubic feet. This is 3 percent more than in 1965 and slightly above the record levels attained in the early 1900's when lumber production was at a peak and large volumes of fuelwood were used for domestic cooking and heating and industrial and agricultural purposes.

Lumber

Lumber production in the United States in 1966 is estimated at 37.1 billion board feet. This is 0.2 billion board feet above output in 1965 and 2.3 billion board feet higher than the average of the last decade.

Softwood lumber production in 1966 is estimated at 29.2 billion board feet. This is the same as in 1965, but 1.1 billion above the yearly average in the 1956–65 period.

During the early months of 1966, wholesale prices of softwood lumber advanced rapidly in response to a major railway car shortage, forward buying in anticipation of labor disputes and seasonal demands, and military procurement. These, however, were temporary influences, and prices of most softwood species began to fall in June and are now approaching 1965 levels.

Imports of softwood lumber are expected to total 5.2 billion board feet and exports 0.9 billion board feet in 1966. These levels are respectively 6 percent and 13 percent above those of 1965.

Apparent softwood lumber consumption in 1966 is estimated at 33.5 billion board feet. This is about the same as in 1965, but 7 percent higher than the annual average in the last 10 years.

Trends during the first 8 months indicate that hardwood lumber production will be about 7.9 billion board feet in 1966. This is a little above the 7.7 billion board feet produced in 1965 and 18 percent more than the annual average in 1956–65.

In August 1966 the wholesale price index of hardwood lumber was 127.5 (1957–59=100). This exceeded the January 1966 level by 6 percent and that of January 1965 by 20 percent.

Imports of hardwood lumber are expected to total about 0.4 billion board feet and exports 0.2 billion board feet in 1966. These levels are about 0.1 billion board feet above 1965.

Consumption of hardwood lumber in 1966 is expected to be 8.1 billion board feet. This is 3 percent higher than in 1965 and 19 percent more than the average annual consumption in the last 10 years.

Pulpwood

Pulpwood production (roundwood and chips) in the United States in 1966 is estimated at 55 million cords—10 percent greater than in 1965 and 1.6 times output of a decade ago. Production of round softwood pulpwood is expected to be 29.2 million cords—up 4 percent from 1965; and round hardwood pulpwood 11.3 million cords—14 percent more than in 1965. Chip production, mainly from the byproducts of wood-using industries, is estimated at 14.5 million cords—22 percent more than in 1965.

Pulpwood prices rose from 5 to 10 percent in the latter part of 1965 and early 1966. These increases, the first since the early 1950's, were largest for hardwood species. The price of southern pine, the most important pulpwood species, rose from about $16.00 per cord in 1964 to $17.00 per cord in 1966 (prices in the Midsouth)—a rise of about 6 percent.

First-half trends indicate that imports of pulpwood will be about 1.5 million cords in 1966—roughly 0.2 million cords more than in 1965. Exports, largely chips going to Japan, are estimated at 0.3 million cords—about double those in 1965.

Consumption of pulpwood in U.S. mills in 1966 is expected to be 55.8 million cords. This exceeds 1965 consumption by about 5.1 million cords or 10 percent. During the past 10 years U.S. consumption of pulpwood has increased at an average annual rate of 4.3 percent—or somewhat more than 1.7 million cords a year.

Softwood plywood

Softwood plywood production in the U.S. in 1966 is expected to total 13.1 billion square feet (3/8 inch basis)—6 percent more than in 1965. The wholesale price index for softwood plywood was 82.2 in August 1966, 5 percent under the 1965 level and 20 percent below the high reached in April 1966. There has been a slow downward trend in softwood plywood prices since the early 1950's.

The United States does not maintain a significant foreign trade in softwood plywood, and consumption is roughly equal to domestic production. Consumption has increased at an annual rate of 9 percent in the last decade. But the rate of increase is expected to be somewhat lower in the months immediately ahead because of the depressed housing market.

Hardwood plywood

Hardwood plywood production in 1966 is estimated at 2.5 billion square feet (surface measure)—about 9 percent above output in 1965 and 1.5 times production in 1956. The wholesale price index of hardwood plywood in August was 99.2—about 1 percent above the 1965 average. Although some fluctuation has occurred, there has been no significant change in wholesale prices of hardwood plywood in recent years.

Hardwood plywood imports are expected to total 2.5 billion square feet (surface measure) in 1966—an increase of about 20 percent over 1965 and more than 3½ times imports a decade ago. Exports are relatively negligible.

Consumption of hardwood plywood in 1966 is expected to be 5 billion square feet. This exceeds 1965 use by 14 percent—about the same as the average annual rate of increase in the 1960's.

Veneer logs

Softwood veneer log production in 1966 is estimated at 5.7 billion board feet. This exceeds the 1965 cut by 6 percent, and is some 2.3 times the output of 10 years ago.

The use of southern pine logs for plywood has been growing rapidly since 1964, when the first southern softwood plywood plant started production. There are now 30 such plants with a combined annual capacity of almost 2.2 billion square feet of plywood operating or under construction.

Hardwood veneer log production in 1966 is estimated at 925 million board feet—about 6 percent above the 1965 cut. In the last decade and a half output has fluctuated between 0.8 billion and 1.0 billion feet a year.

Prices of Douglas-fir peeler logs (veneer logs) in Washington have shown an upward trend since about 1962. Fragmentary data in some State forest product price reports indicate that veneer log prices of other species, especially hardwoods, have also been moving upward. These increases and the rapid growth in hardwood plywood and veneer imports suggest that the veneer and plywood industries are having difficulty in obtaining veneer logs of the kinds and qualities needed.

Miscellaneous industrial timber products

The production of miscellaneous industrial roundwood products, i.e., cooperage logs, poles and piling, fenceposts, mine timbers, and an assortment of other products such as hewn ties, box bolts, excelsior bolts, turnery bolts, shingle bolts, charcoal wood, and farm poles, is expected to be approximately 460 million cubic feet in 1966. This is the same as the estimated 1965 production and represents about 4 percent of all roundwood produced.

Naval stores

The long standing gap between production and demand for U.S. rosin, which increased rosin stocks for six consecutive years, will be eliminated in the current crop year (ending March 31, 1967). Stocks next March 31 will be substantially lower than a year earlier. A reduction in price support stocks is expected. The reversal in the rosin situation stems mainly from increased production costs and lower world prices which have reduced production here and abroad. At the same time, utilization of domestic rosin has increased, particularly for export.

At present price levels and barring recession, these trends are likely to accelerate in the next (1967-68) crop year. Spurred by further decreases in production here and abroad, resulting from increased costs and continued low rosin prices, domestic stocks of all types of rosin may be down to a 5 months' supply by March 31, 1968. Price support stocks will probably be down about one-fourth from today's level.

The turpentine situation should continue firm at present price levels, notwithstanding an apparent buildup in stocks. Practically all of the increase is in stocks of sulfate turpentine which, nevertheless, is virtually unobtainable in the market.

GENERAL ECONOMIC TRENDS

Economic activity rising in 1966—prices also up

During the first quarter of 1966 the gross national product reached a seasonally adjusted annual rate of $640.5[1] billion (1958 prices)—$9.3 billion above output in the fourth quarter of 1965 (*7,34*).[2] During the second quarter, output rose by another $3.0 billion.

Disposable personal income, the source of the money used by consumers for the purchase of homes, furniture, and other products, followed the upward trend in gross national product during the first quarter of 1966, reaching a seasonally adjusted annual rate of about $448.4 billion (1958 prices)—$4.5 billion higher than that of the fourth quarter of 1965 (table 1, fig. 1). There was a slight decline in income in the second quarter of 1966 to $447.8 billion, but current trends indicate a rise in the third quarter (*48,49*).

Civilian employment in July 1966 was at a seasonally adjusted level of 74.1 million, up about 1.5 million from July 1965 and nearly 0.4 million above that of January 1966 (*7*) (fig. 1). The unemployment ratio for civilian workers (3.9 percent in July 1966) was substantially below the 1965 ratio (4.6 percent) but somewhat above ratios attained earlier in the year (3.7 percent in February).

Because of nearly full use of labor and economic resources, prices were rising in 1966. In August the wholesale price index (1957–59=100) for all commodities was 106.8 (*53*) (table 1, fig. 1). This was 4.3 points above the 1965 price level and 6.3 points higher than that of 1964 when the current upward trend began. The July consumer price index (1957–59=100) was 113.3—3.4 points above that of 1965, and the high in a trend that has been upward since the early 1950's (*50*).

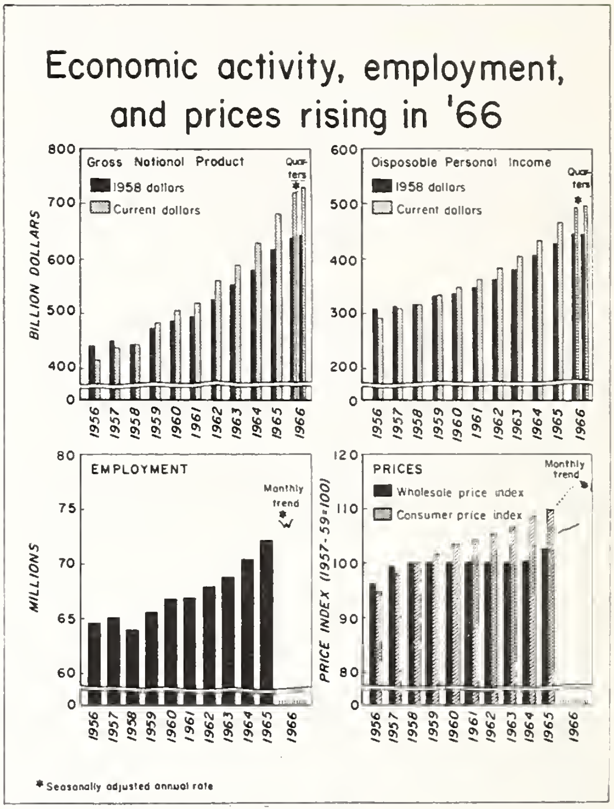

FIGURE 1

Timber product markets show varying trends—industrial production up but construction down

During the first half of 1966 there were varying trends in the sectors of the economy that are important markets for timber products. The Federal Reserve Board index of industrial production in July was 157.4 (seasonally adjusted annual rate 1957–59=100)—substantially higher than the January level of 150.2 and the 1965 index of 143.3 (*9,10*) (table 1, fig. 2). The index of manufacturing output rose from 144.9 in 1965 to 159.7 in July. Production of furniture and fixtures, major end uses of hardwood lumber, veneer, and plywood was at an index level 169.9 in July, about 13 points above that of 1965. The output of containers, another important end use of timber

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[1] The seasonally adjusted annual rate in current dollars was $721.2 billion in the first quarter and $732.3 billion in the second quarter.

[2] Italic numbers in parentheses refer to "Literature Cited", p. 38).

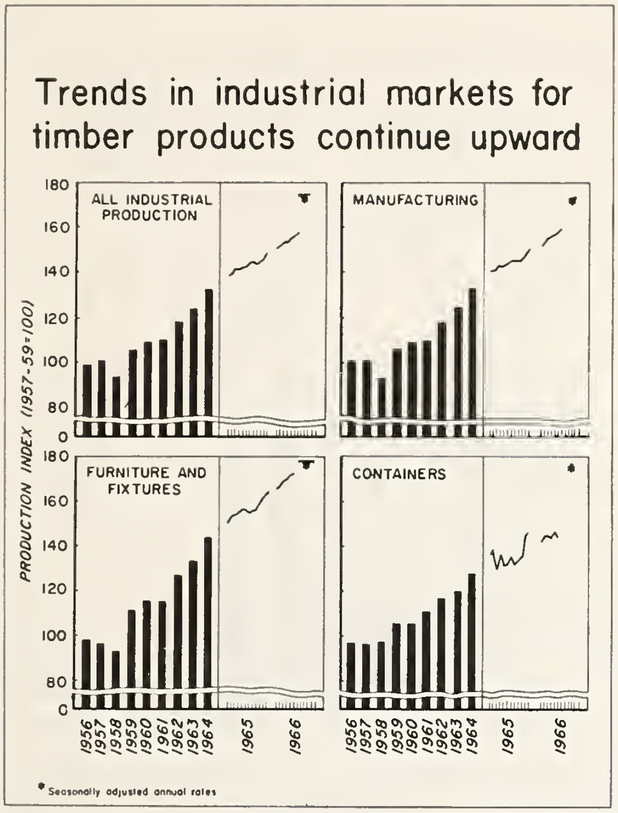


FIGURE 2

products and a leading indicator of economic trends, increased from 136.6 in 1965 to 144.4.

Total expenditure for new construction, the Nation's largest market for timber products, was $63.7 billion (3-month average of seasonally adjusted annual rate in 1957–59 dollars) in the second quarter of 1966 (*35,46*). This was slightly above 1965 expenditures of $62.1 billion but about $2.9 billion under the first-quarter 1966 rate of $66.6 billion (table 1).

Second-quarter 1966 expenditures for nonresidential building and for other types of construction, such as public utilities, highways, streets, and conservation and development, were also above 1965 levels and under the first-quarter 1966 rates (fig. 3). Capital spending plans of business indicate that increases in nonresidential construction expenditures are likely in the quarters immediately ahead (*21*). New plant and equipment expenditures are currently estimated at $61.6 billion (current dollars) for the third quarter of 1966 and $63.6 billion for the fourth quarter—both above the second-quarter rate of $60.1 billion.

Residential construction down sharply and falling

Spending on new residential construction, including repairs and alterations of existing structures, was $22.5 billion (seasonally adjusted annual rate 1957–59 prices) in June 1966—about $1.5 billion under 1965 expenditures and $1.8 billion below the January 1966 rate of $24.3 billion (*35,46*). A rise in the cost of dwelling units (the average cost, $17,000, of new private nonfarm one-family units started in the spring was about $750 above the 1965 average) tended to hold expenditures up, as there was a large decline in dwelling unit starts.

During May, June, and July of 1966 the seasonally adjusted annual rate of dwelling unit starts averaged 1.2 million, about 0.5 million below the January rate and 0.3 million under the units started in 1965 (*36, 46*) (table 1, fig. 4). Permits issued for future construction in July were 3 percent under the June level and 26 percent below issuances in 1965—

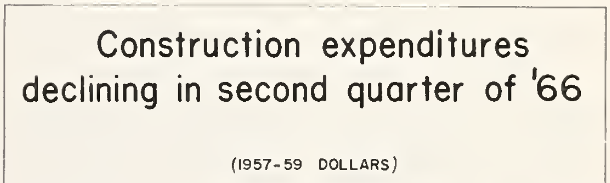


FIGURE 3

with indications of a further fall. The drop in housing starts and permits has occurred in all geographic areas, although the steepest declines have been in the Northeast and North Central regions.

Construction of multifamily structures (buildings containing 3 units or more), which accounted for nearly all of the increase in residential construction in the late 1950's and early 1960's, followed the general trend in total starts (fig. 4). At midsummer, the seasonally adjusted annual rate of construction of multifamily dwellings was about 0.4 million units, a third of all units started.

Rental vacancy rates were 6.8 percent in the second quarter of 1966, down slightly from 7.5 percent in the first quarter and 7.7 percent in the fourth quarter of 1965 (*37, 38*). Although current rates are not significantly different from the rates that have prevailed since the late 1950's, they do suggest that current construction is falling behind the increase in demand for dwelling units resulting from new household formations and replacements of existing dwelling units.

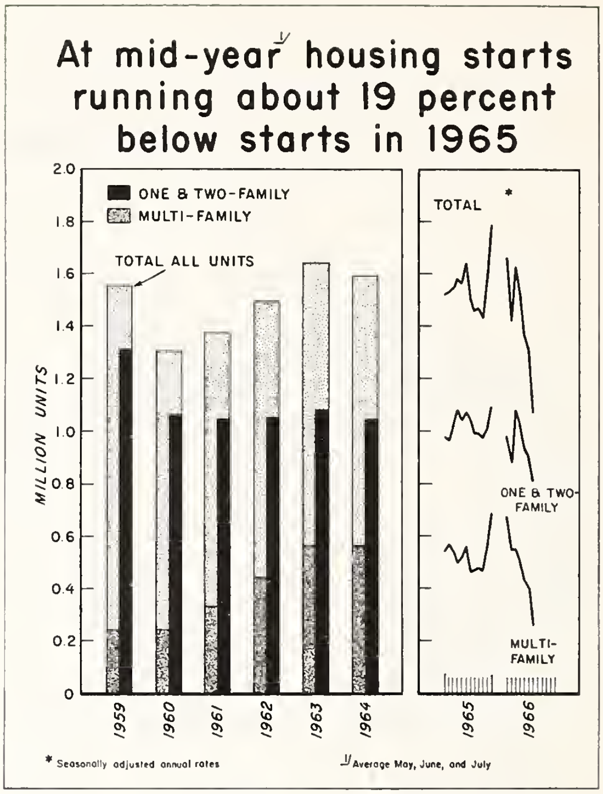


FIGURE 4

Interest rates rising and mortgage money scarce

One of the causes of the decline in housing starts has been rising interest rates and a shortage of mortgage money for housing purchases. As illustrated in figure 5, home mortgage rates (conventional first mortgages) for new homes increased from 5.78 percent in December 1965, a level that had been maintained without much change for several years, to 6.18 percent in August 1966 (*49*). Lending by savings and loan associations to residential and nonresidential builders in July 1966 was $1.2 billion, 45 percent below July a year ago. This decline reflects a reduction in the supply of money available to the associations. Savers have been putting money into high-yield savings certificates offered by commercial banks.

There are indications that home mortgage loan money will remain tight in coming months. Rising prices for houses and the rate of household formation are also likely to adversely affect housing starts.

In the longer run the outlook is more favorable. An anticipated increase in population (*43*) and the formation of new households, the

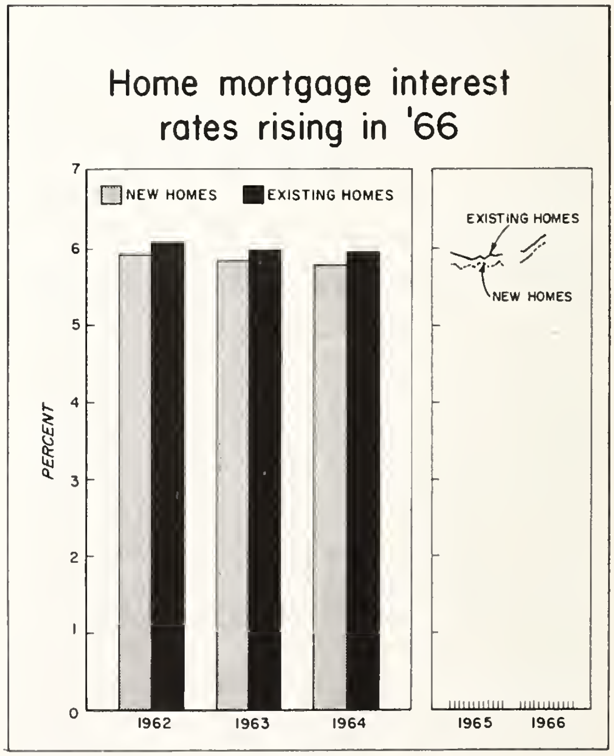


FIGURE 5

basic source of demand for new housing, and the decline in vacancy rates, resulting from underbuilding, are expected to result in an increase in residential construction within a relatively short period. A recent Forest Service appraisal (*31*) indicates substantial increases are in prospect within the next decade or so. By the early 1980's new household formations may average about 1.3 million a year, compared with less than a million in the 1950's. Replacement of existing units is also likely to increase rapidly in an expanding economy and with the housing programs that are in prospect. Construction of housing units may thus reach an average of about 2.4 million units a year in the 1980–85 period—about 60 percent more than the 1.5 million started in 1965.

TIMBER PRODUCTION, PRICES, TRADE, AND CONSUMPTION

Domestic timber production up 3 percent in 1966

Timber production from domestic forests in 1966 is estimated at 11.7 billion cubic feet (table 2, fig. 6). This is about 3 percent above output in 1965 and 11 percent more than the annual average in the 1956–65 decade. The rise in 1966 is a continuation of an upward trend that began in 1962. The increase has been composed of pulpwood, saw logs, and veneer logs. The cut of fuelwood and miscellaneous industrial timber products (cooperage, poles, piling, fence posts and related products) has shown a slight decline.

Saw logs are expected to compose about 49 percent of the 1966 output, pulpwood 27 percent, veneer logs 9 percent, fuelwood 9 percent, miscellaneous industrial products 4 percent, and log exports 2 percent.

It is estimated that the forests of the West and the South will each supply about 40 percent of the timber cut in 1966 and those in the North 20 percent. Western forests are expected to be the source of about 85 percent of the softwood veneer logs and nearly 60 percent of the saw logs harvested. Three-fifths of the pulpwood and most of the hardwood veneer logs and miscellaneous industrial timber products are expected to come from forests in the South.

In recent years about 70 percent of the timber produced has come from softwood species, chiefly Douglas-fir and southern pine. Oaks and gums have been the most important hardwood species.

Stumpage prices continue upward trend

Stumpage prices for most species of timber sold from the National Forests have been rising since 1962, and this upward trend continued in the first two quarters of 1966 (table 3, fig. 7). For example, the average price of Douglas-fir in the second quarter of 1966 was $52.20—23 percent above the average in 1965 and 37 percent above that of 1964 (*30*). Oak stumpage averaged $25.90 per thousand board feet in the second quarter, about 22 percent above the 1965 average. Prices of southern pine, ponderosa pine, and maple showed generally similar upward trends. As a result of the increases, stumpage prices for most species are now above the previous highs reached in the mid-1950's.

There has been much fluctuation in stumpage prices from quarter to quarter and year to year. This fluctuation and the wide variation in prices among species (shown in table 4 and the following tabulation) reflect several factors such as timber quality, amount of competition, and timber accessibility.

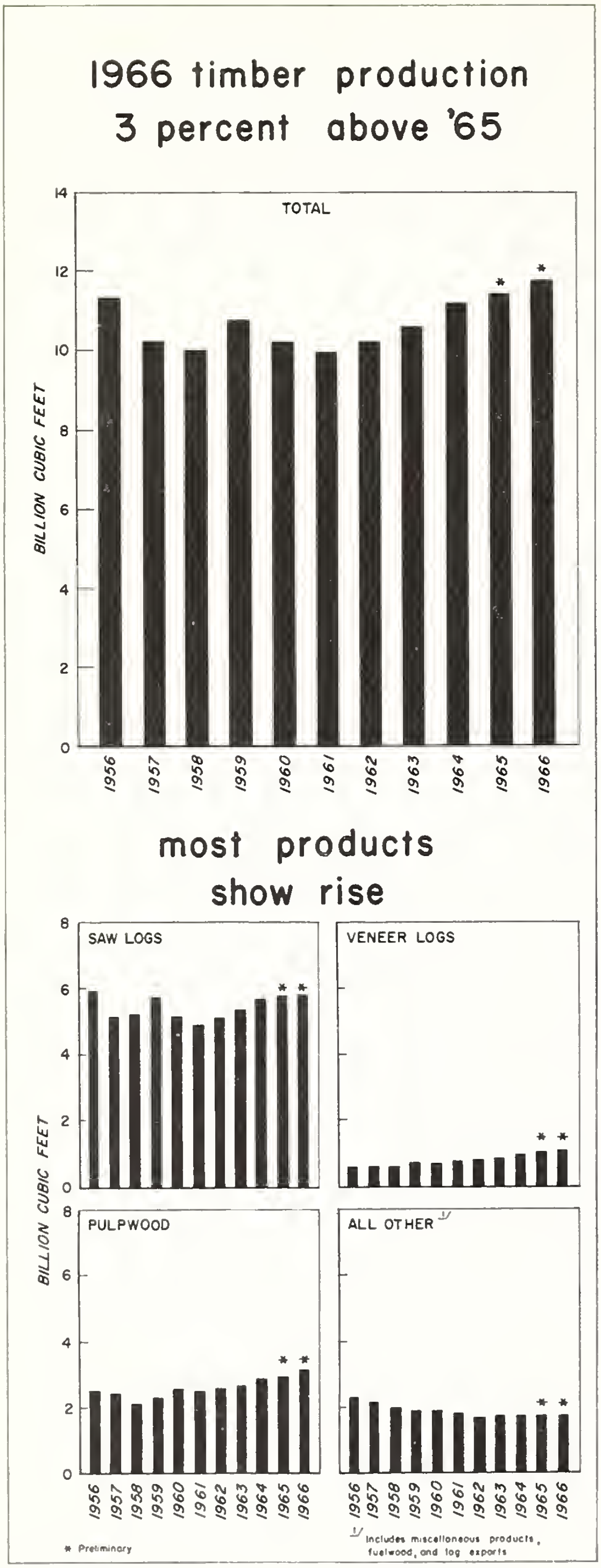


FIGURE 6

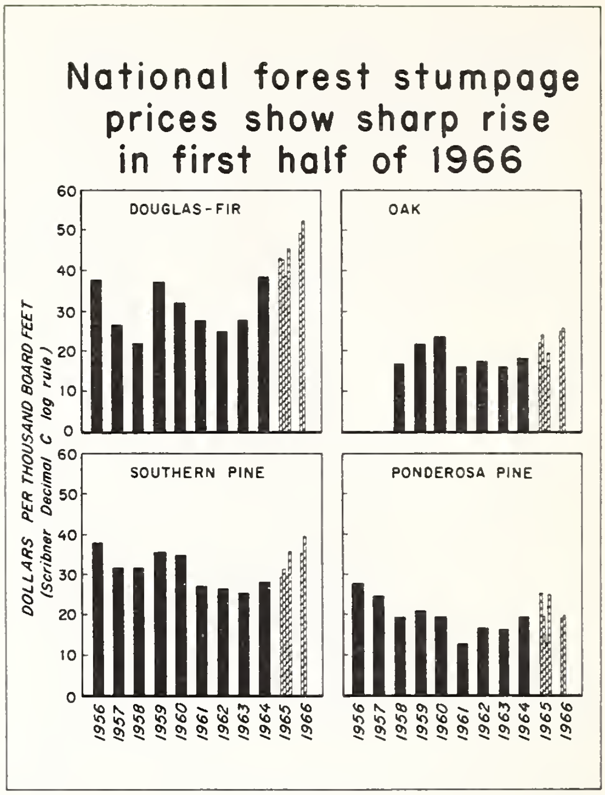


FIGURE 7

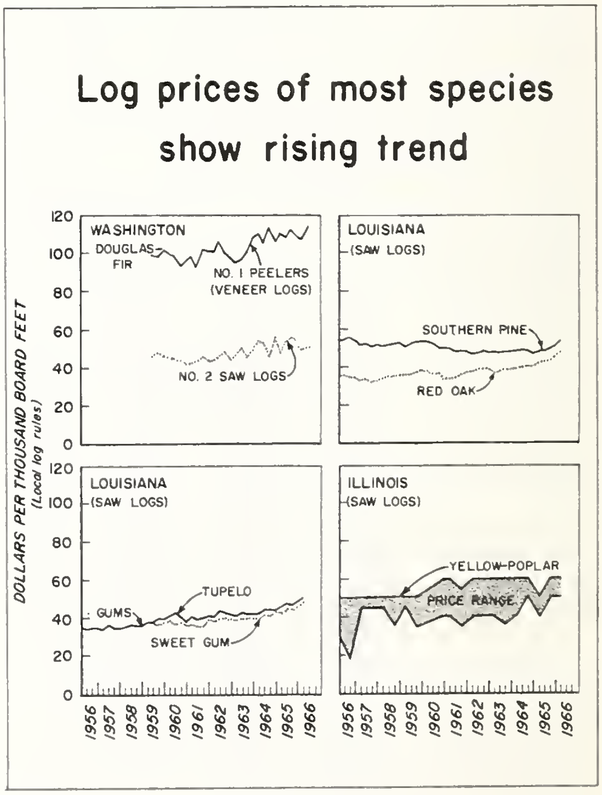


FIGURE 8

Species	*State*	*Price per thousand board feet* [1]
Saw log stumpage:		
Black walnut	Illinois (*12*)	$50.00–$100.00
Hickory	do	10.00– 20.00
Sycamore	do	10.00– 20.00
Southern pine	Louisiana (*13*)	25.00– 38.00
Tupelo gum	do	18.00– 24.00
Cherry	West Virginia (*57*)	13.00– 50.00
Veneer stumpage:		
Walnut:	Ohio (*19*)	
Prime 16–20 inches		200.00–1,000.00
Prime 21 inches +		300.00–1,600.00
Cooperage stumpage:		
White oak	Kentucky (*55*)	30.00– 90.00
		Price per cord
Pulpwood stumpage:		
Southern pine	Louisiana (13)	4.20–4.70
Hardwoods	do	1.50–1.85
Spruce and fir	New Hampshire (northern) (*6*)	4.00–6.50

[1] The prices generally represent timber buyers' quotations without standardized specifications as to grade, log rule and other factors that affect the value of standing timber.

Log prices moving up in 1966—continuing established trend for most species

Log prices have been following the upward trend in stumpage prices in 1966 (tables 5, 6, and 7 and fig. 8). For most species this was a continuation of the trend for several years. The rise has been largest for hardwoods and presumably reflects growing scarcities of the kinds and qualities of logs in demand by industry.

In contrast to the trends of most species there was a slight downward trend in southern pine log prices from the early 1950's through 1964. This was a period in which forest survey statistics showed substantial improvements in softwood timber supplies in the South. Since 1964 there has been a significant increase in prices—from $47.60 per thousand in the fourth quarter of 1964 to $54.00 in the first quarter of 1966. This rise may in part reflect increased competition for timber resulting from the rapid expansion of timber-based industries in the South, especially in softwood plywood and wood pulp. The expansion in all industries has increased the cut of southern pine by about 0.6 billion cubic feet or roughly 25 percent since 1962.

Plants and facilities now under construction or planned indicate further large increases are in prospect. This means increased competition and rising stumpage and log prices unless timber-growing programs are expanded to meet the additional demand.

There is a wide variation in log prices among species and different areas of the country. These variations are shown in the tabulation below of saw log prices quoted in various recent State price reports on forest products.

Species	*State*	*Price per thousand board feet, log scale*
Redwood, camp run unpeeled	California (Arcata-Eureka area) (*11*)[1]	$65.00–$ 70.00
Southern pine	Louisiana (*13*)[1]	49.00– 60.00
Sweetgum	do[1]	44.00– 51.00
White oak	Missouri (*14*)[1]	20.00– 90.00
Yellow birch	New Hampshire (Grafton County) (*6*)[1]	50.00– 90.00
Hard maple	Ohio (*19*)[2]	40.00– 99.00
Walnut	do[2]	55.00– 178.00
Alder	Oregon (Lane County) (*20*)	42.00– 46.00

[1] F.o.b. mill

[2] Delivered to buyer

Most of this variation reflects differences in quality, competition, scaling practices, and log rules.

Species	*State*	*Price per thousand board feet, log scale*
Douglas-fir:		
No. 2 old growth	do	60.00– 70.00
No. 3 old growth	do	40.00– 50.00
Maple	do	40.00– 42.00
Beech, good quality	Kentucky (*55*)[1]	35.00– 80.00
Tulip poplar	do[1]	50.00– 125.00
Cedar, grade 2	Washington (western) (*56*)[1]	33.50– 46.50
Hemlock-white fir:		
Grade 2	do[1]	39.00– 45.00
Grade 3	do[1]	36.50– 43.50
Cherry	West Virginia (*57*)[1]	70.00– 95.00

[1] F.o.b. mill

[2] Delivered to buyer

Most of this variation reflects differences in quality, competition, scaling practices, and log rules.

Wage rates rising in logging and timber-based industries—generally in line with other industries

Part of the increase in log prices may be due to rising wages. Hourly earnings in logging in Washington increased from an average of $2.69 in 1956 to $3.34 in 1965—a rise of 24 percent (table 8). In the same period, average hourly pay in the lumber and wood products industries in Arkansas rose from $1.18 to $1.58, an increase of 34 percent. In New York average hourly earnings in these industries rose by 36 percent, from $1.54 in 1956 to $2.10 in 1965. The raises in all areas were generally in line with those in other industries.

There are still substantial differences in wage levels among industries and different sections of the country. In most sections wage rates in logging and the lumber and wood products industries are lower than in most other industries. Wages in the South also tend to be lower than in other sections of the country.

Net imports of timber products and log exports up sharply

Trade statistics for the first half of 1966 indicate that total net imports of timber products, including the roundwood equivalent of lumber, plywood, veneer, wood pulp, and paper and board, will be about 1.9 billion cubic feet (table 2, fig. 9). This would be about 11 percent above the 1965 figure, and the high in a trend that has been rising fairly rapidly in the last two decades.

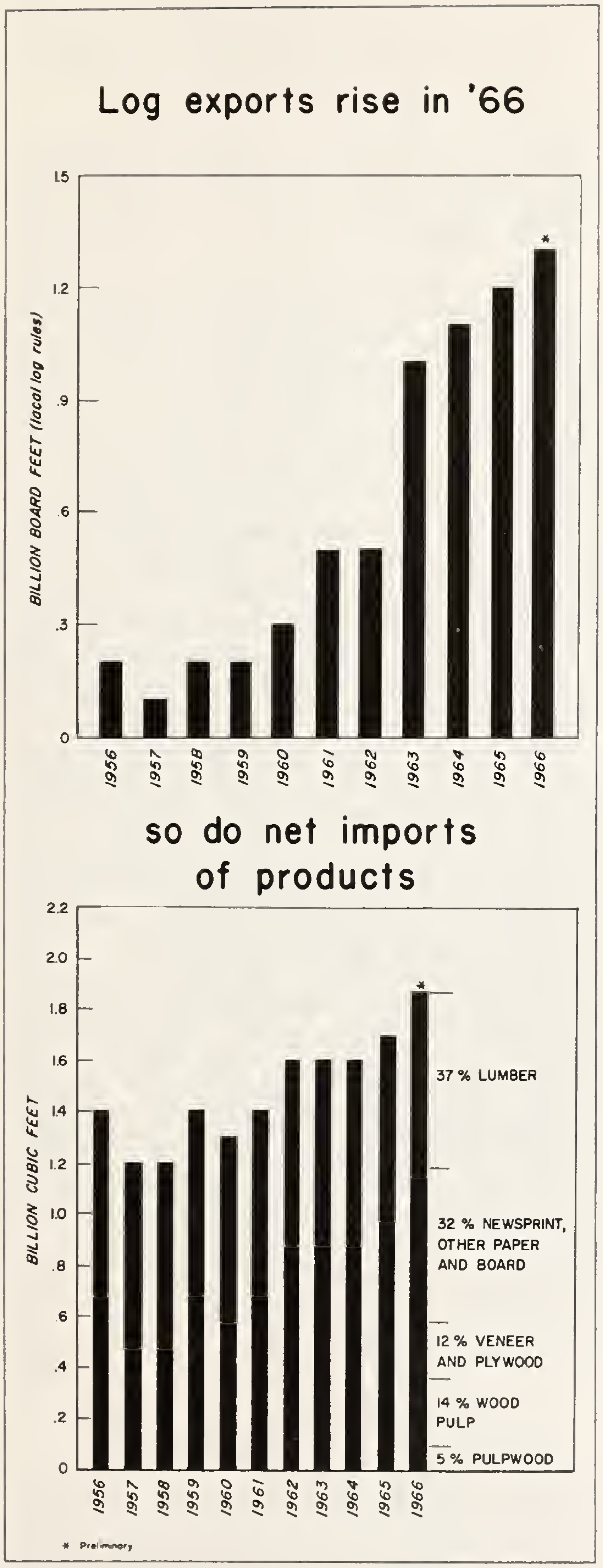
Lumber is expected to compose about 37 percent of the 1966 net imports (roundwood equivalents); newsprint and other paper and board grades 32 percent; wood pulp 14 percent; and pulpwood 5 percent (fig. 9). Veneer and plywood imports, which have been increasing rapidly in the last decade and a half, will account for the remaining 12 percent.

Although the United States is a large importer of timber products, log exports have shown fast growth in the last few years (table 9, fig. 9). Between 1959 and 1965 such exports rose from 0.2 billion board feet to 1.2 billion board feet, a sixfold increase. Trends in shipments during the first half of 1966 indicate that the total for the year may be about 1.3 billion board feet.

Nearly all of the additional volume of logs exported since 1960 has come from the Pacific Northwest (*26*). Shipments from this region in 1965 totaled 900 million board feet (all softwood), about 6 percent of all logs produced in the area. The 1965 exports were 8 percent above those in 1964 and about 9 times the quantity shipped in 1960.

Japan, the destination of 86 percent of the shipments in 1965, has been the principal market for the increased exports from the Pacific Northwest. But shipments to Canada (British Columbia) grew from 7 million board feet in 1961 to 121 million board feet in 1965. Reports from Japan indicate that the demand for imported timber is expected to nearly double in the next decade. This may result in further increases in softwood log shipments to that country from the Pacific Northwest.

Some operators of sawmills and other wood-using plants in the Pacific Northwest have maintained that their operations have been adversely affected by log exports and that the welfare of communities in which their mills are located is endangered. On the other hand,



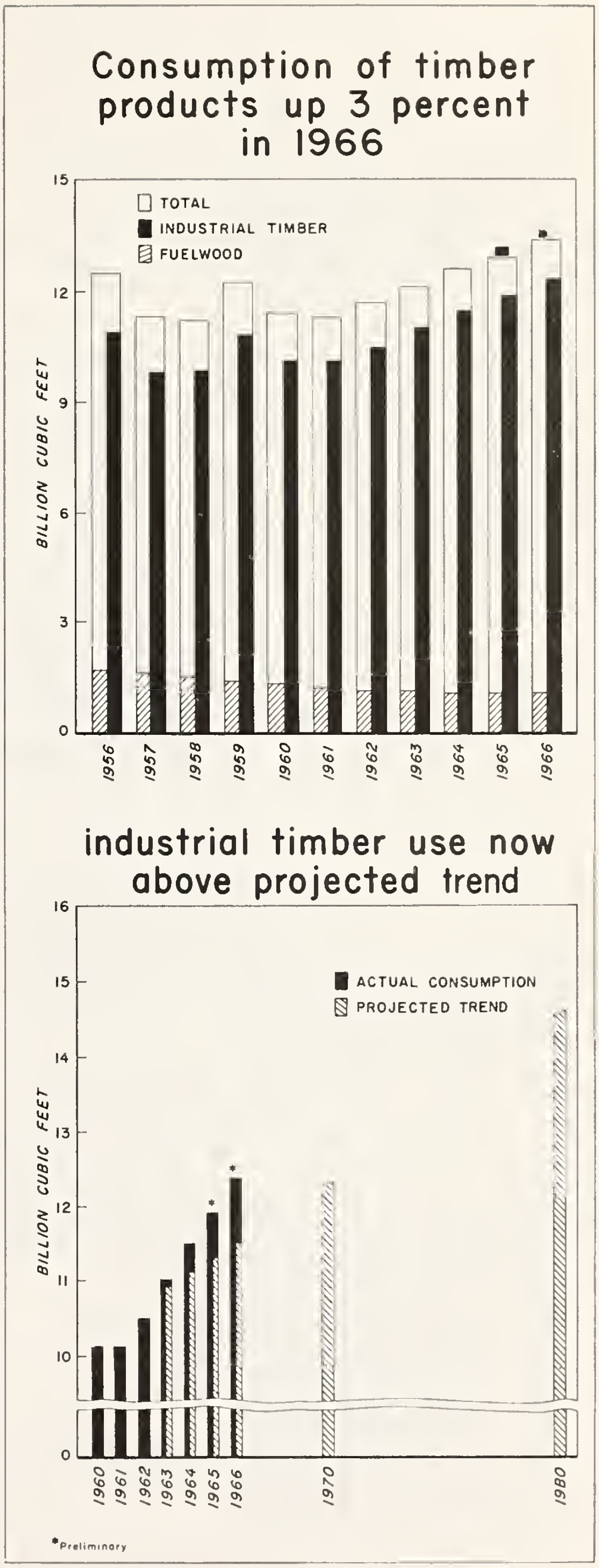


FIGURE 9

FIGURE 10

proponents of exports have pointed out that there are substantial economic benefits to forest landowners, loggers, longshoremen, and exporters, and that the money received from such trade (about $70.4 million in 1965) contributes importantly to local business and employment. Those concerned with monetary matters also point out that this $70.4 million significantly reduced the country's balance of payments deficit.

Most of the logs exported from the Pacific Northwest are from the Douglas-fir subregion of western Oregon and western Washington. Heaviest exporting is from Puget Sound and Grays Harbor ports. In these areas the rise in log exports has added in an important way to the competition for stumpage and logs and contributed to the difficulties of the domestic industry, especially of the smaller nonintegrated mills that depend largely on purchased stumpage and logs. The competition has been intensified by growth in domestic demands for plywood, lumber, and wood pulp. In the 1960–65 period, for example, log consumption in domestic plants in the subregion increased by about 1.5 billion board feet.

Although the volume is not large, some of the log exports from the East have had important effects in the U.S. For example, walnut log exports to western Europe have increased the demand for a scarce resource and contributed to the rapid rise in walnut log prices that is illustrated in table 5.

Log imports into the United States were 68 million board feet in 1965. This volume is below that of the early 1950's when imports were around 200 million board feet a year and the early 1960's which averaged about 100 million. Log imports are used in the manufacture of lumber, veneer, plywood, and wood pulp and are included in the statistics on domestic production of these products shown in following sections of this report.

Consumption of industrial roundwood to increase 4 percent in 1966—reaches a high of 12.3 billion cubic feet

Consumption of industrial roundwood, i.e., saw logs, veneer logs, pulpwood, and all other products except fuelwood, is expected to show a moderate rise in 1966 to about 12.3 billion cubic feet (table 2, fig. 10). This is about 4 percent above the 1965 level and a new high in the consumption of industrial timber products.

As illustrated in figure 10, consumption of industrial roundwood has been above the trend level projection contained in the recent Forest Service report *Timber Trends in the United States* (*31*). This largely reflects the effects of a rate of economic growth materially in excess of the projections available at the time the report was made.

Per capita consumption of industrial timber products in 1966 is expected to be slightly higher than in 1965 (table 10). There will be small increases in per capita use of veneer logs and pulpwood but no change in saw logs. Per capita use of miscellaneous industrial timber products and fuelwood will decline.

Consumption of all roundwood in 1966—industrial wood plus fuelwood—is estimated at 13.4 billion cubic feet (table 2, fig. 10). This is a new peak—slightly higher than that attained in the early 1900's when lumber production was at an alltime high and much fuelwood was used in domestic cooking and heating and for industrial and agricultural purposes.

LUMBER PRODUCTION, PRICES, TRADE, AND CONSUMPTION

Lumber production up slightly in 1966—hardwoods account for increase

Lumber production in the United States in 1966 is estimated at 37.1 billion board feet (table 11, fig. 11). This is only 0.2 billion board feet above output in 1965 but 2.3 billion higher than the average for the last decade.

Production of softwood lumber in 1966 is estimated at 29.2 billion board feet—the same as in 1965 but about 1.1 billion board feet higher than the average in the last 10 years. During the first quarter of 1966 new orders for softwood lumber were running 10 percent above production. This was caused by (1) forward buying in anticipation of work stoppages from labor disputes, (2) military procurement, and (3) a seasonal rise in purchases by contractors, wholesalers, and retailers. After new labor contracts were signed, new orders began to fall off and during the second quarter were 6 percent below output. The anticipated further drop in the housing market is expected to continue as a depressing influence on new orders and production in the months immediately ahead.

Hardwood lumber production in 1966 is expected to reach 7.9 billion board feet (table 11, fig. 11). This is about 0.2 billion board feet above the 7.7 billion board feet produced in 1965. Since 1961, hardwood lumber production has increased by nearly 2 billion board feet. This upward trend reflects rapid growth in industrial production, especially in furniture and fixtures; increases in the manufacture of pallets and shipping containers; and a sharp rise in railroad tie use.

Douglas-fir, southern pine, ponderosa pine, western true firs, and hemlock are the principal softwood lumber species (fig. 12). Oak, gum, yellow-poplar, maple, and cottonwood are the most important hardwood species.

Regional lumber production showing varying trends in 1966

Lumber production in the major producing regions was showing varying trends in the first part of 1966 (*15*, *22*, *23*, *58*). At the end of the first half of 1966, southern pine production was 6 percent, southern hardwoods 2 percent, west-

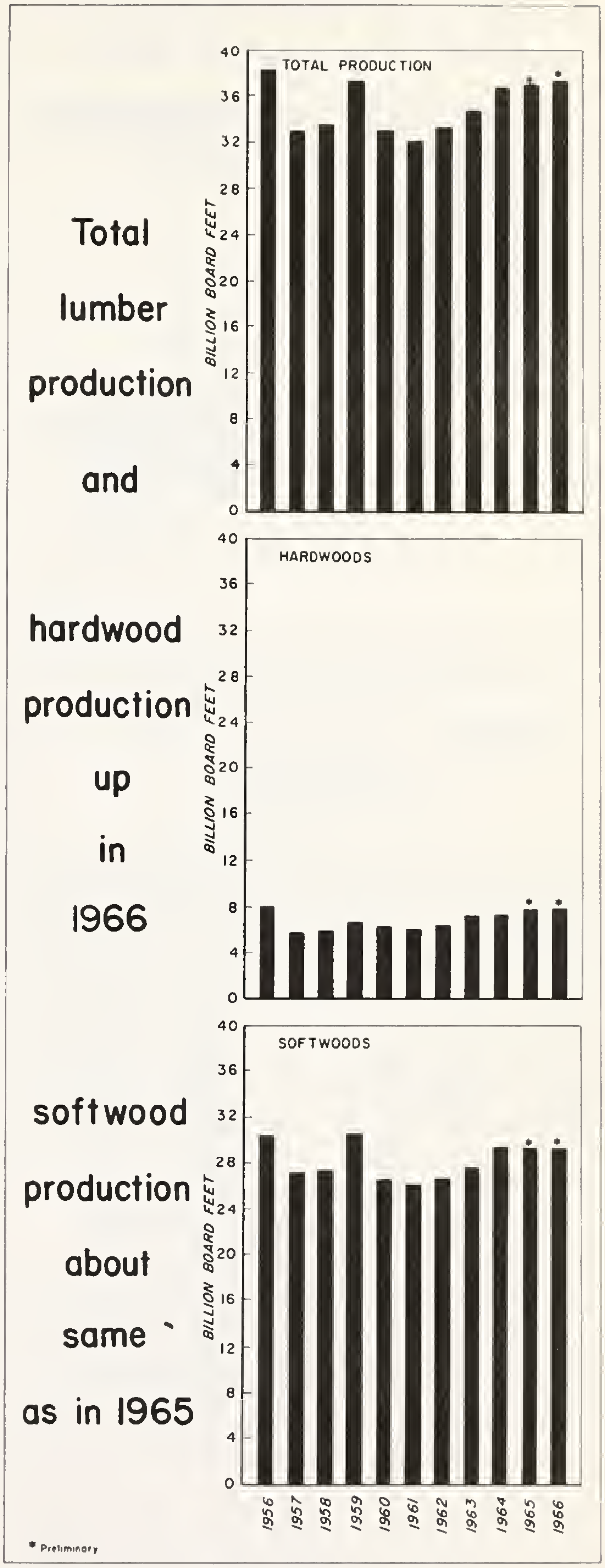


FIGURE 11

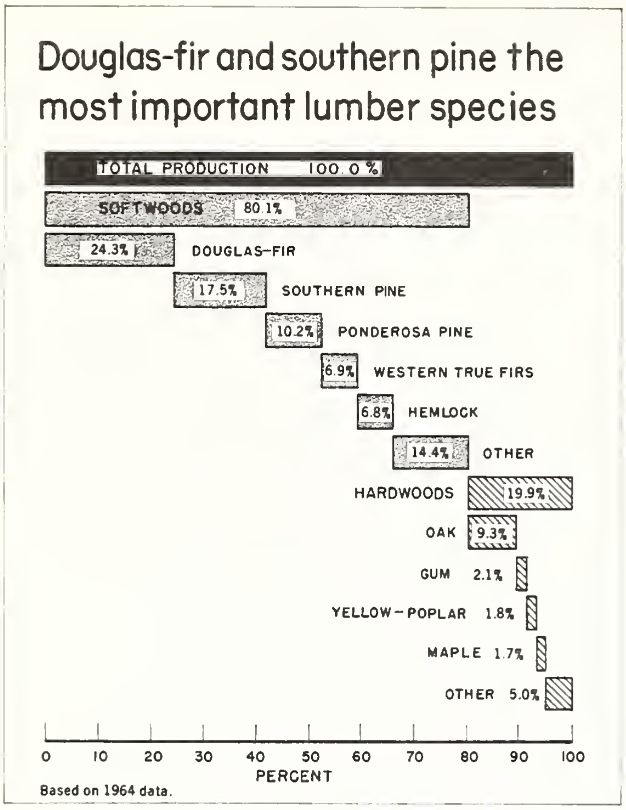


FIGURE 12

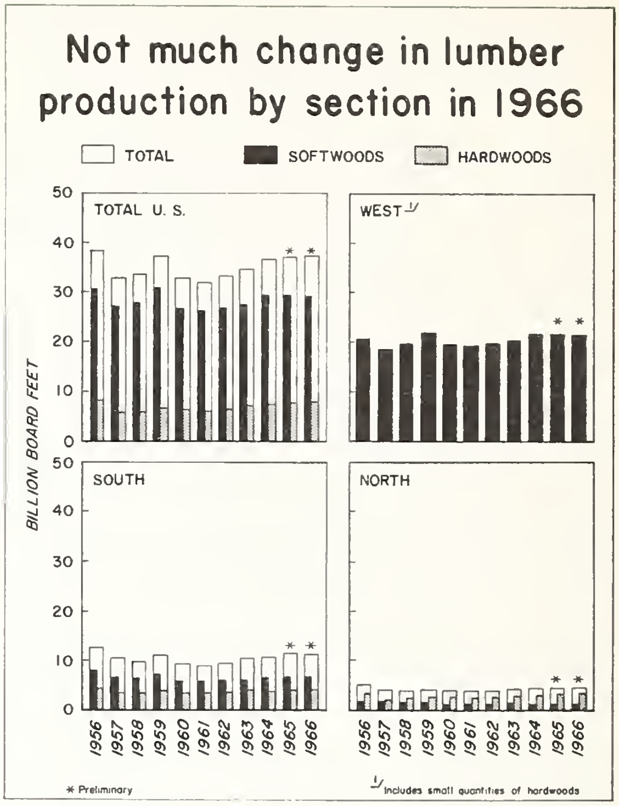


FIGURE 13

ern pine 10 percent, and Douglas-fir 2 percent over the levels attained in the first half of 1965. The increases in the softwood-producing regions are not expected to be maintained in the second half of 1966. Fragmentary data show that the general slump in demand for construction lumber, which started in early summer, has caused a drop in production, and output for the year in most areas is likely to be close to 1965 levels.

1966 lumber production in the West estimated at 21.5 billion board feet—slightly below 1965

On the basis of the above trends and expectations, it is estimated that about 21.5 billion board feet of lumber will be produced in the West[3] in 1966 (table 12, fig. 13). This output, about three-fifths of the U.S. total, is slightly under 1965 production (21.6 billion board feet), but 6 percent above the annual average during the last decade.

About 48 percent of the lumber produced in the West in 1966 is expected to come from the Inland Region,[4] 42 percent from the Douglas-fir region (western Oregon and western Washington), and 10 percent from the California Redwood region.

Lumber production up 2 percent in the South in 1966

Lumber production in the South in 1966 is estimated at 11 billion board feet (table 12, fig. 13). This is about 2 percent higher than in 1965, and 21 percent more than in 1961 when lumber production in the section was at a postwar low of 9.1 billion board feet.

Softwood lumber production in the South in 1966 is estimated at 6.8 billion board feet. Although this is far below the highs reached in the early 1900's, it is substantially in excess of the 5.8 billion board feet cut in 1961. The rise since 1961 is partly attributed to the improvement in the pine sawtimber supply situation in the 1950's and early 1960's, especially in the States west of the Mississippi. Improvements in manufacturing and marketing practices resulting from the closing of thousands of small sawmills (see below) have also contributed.

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[3] The West includes 11 western States, South Dakota, Alaska, and Hawaii. The South consists of the 12 most southern States, including Virginia. The North includes the remaining 24 States.

[4] The Inland Region (Western Pine Region) extends from the summits of the Cascade and California Coastal Ranges to the Great Plains; and from Canada to Mexico.

Hardwood lumber production in the South in 1966 is estimated at 4.2 billion board feet—2 percent higher than in 1965 and 11 percent above average for the last decade.

1966 lumber production in the North about the same as in 1965

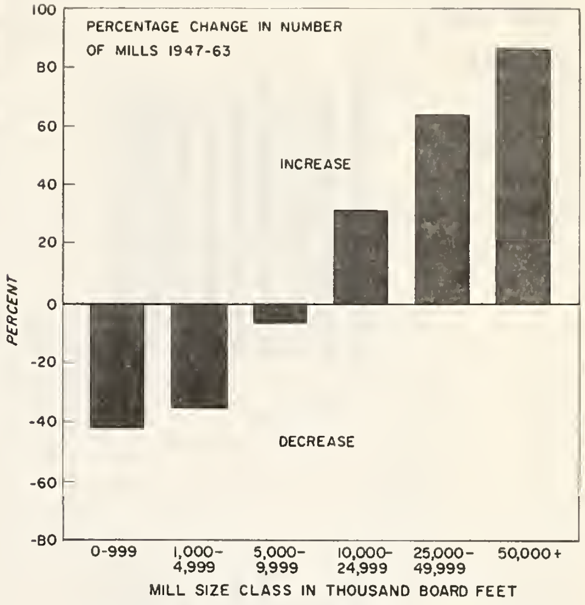
Lumber production in the North in 1966 is estimated at 4.6 billion board feet (table 12, fig. 13). This is about the same as in 1965, but 10 percent more than the average for the last 10 years. Hardwoods compose most of the lumber produced in this section.

Small mills have been leaving the lumber industry—large mills cutting bigger proportion of output

There have been some major changes in the lumber industry in the last two decades. The number of mills has declined from more than 50,000 in the late 1940's and early 1950's to about 35,000 at present (table 13, fig. 14). Nearly all of the mills leaving the industry have been small, i.e., cutting less than 1 million board feet a year. There has also been a substantial decline in the number of mills cutting from 1 to 5 million feet a year and a smaller decrease in the number cutting from 5 to 10 million feet. In contrast, there has been an increase in the number of mills cutting over 10 million feet and a near doubling of those cutting over 25 million feet a year.

The proportion of the lumber cut coming from the smallest mills has followed the trend in numbers and declined steadily, while that from the larger mills has increased (table 13, fig. 14). In 1947, for example, mills cutting over 25 million board feet a year produced 23 percent of the lumber. In 1963 these mills cut about 40 percent of the total. In the same period the output of the smallest mills, cutting

Number of small mills declining-large mills increasing



lumber production shifting to larger mills

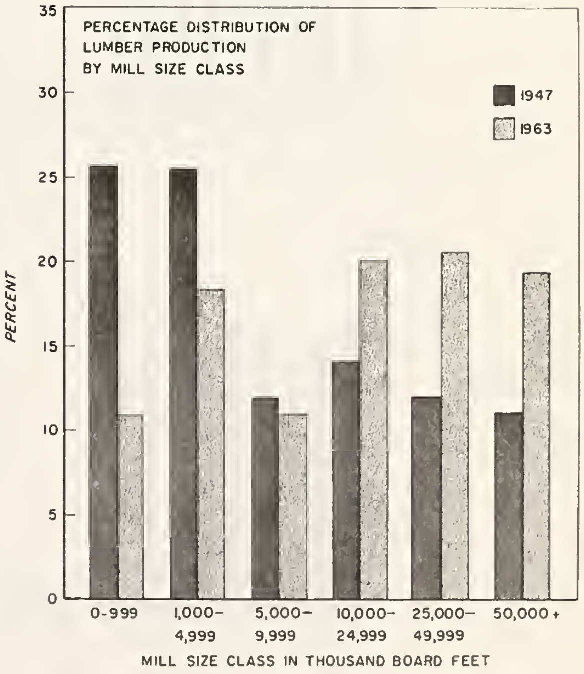
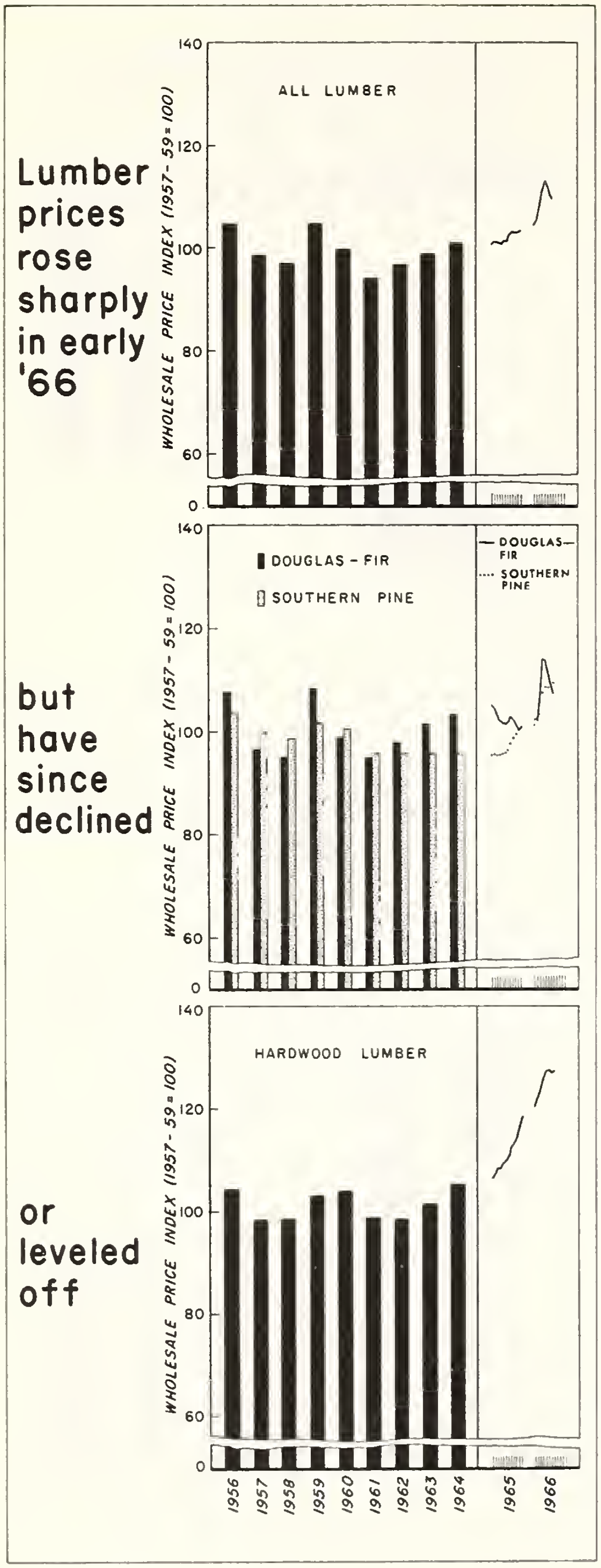


FIGURE 14



Lumber prices rose sharply in early '66

but have since declined

or leveled off

FIGURE 15

less than 1 million feet a year, dropped from 26 to 11 percent of the total.

Changes in number of mills and in the distribution of production by mill size class have been nationwide. Most of the small mill losses, however, have been in the East where these mills were concentrated. Nearly all of the increase in the numbers of large mills has been in the West.

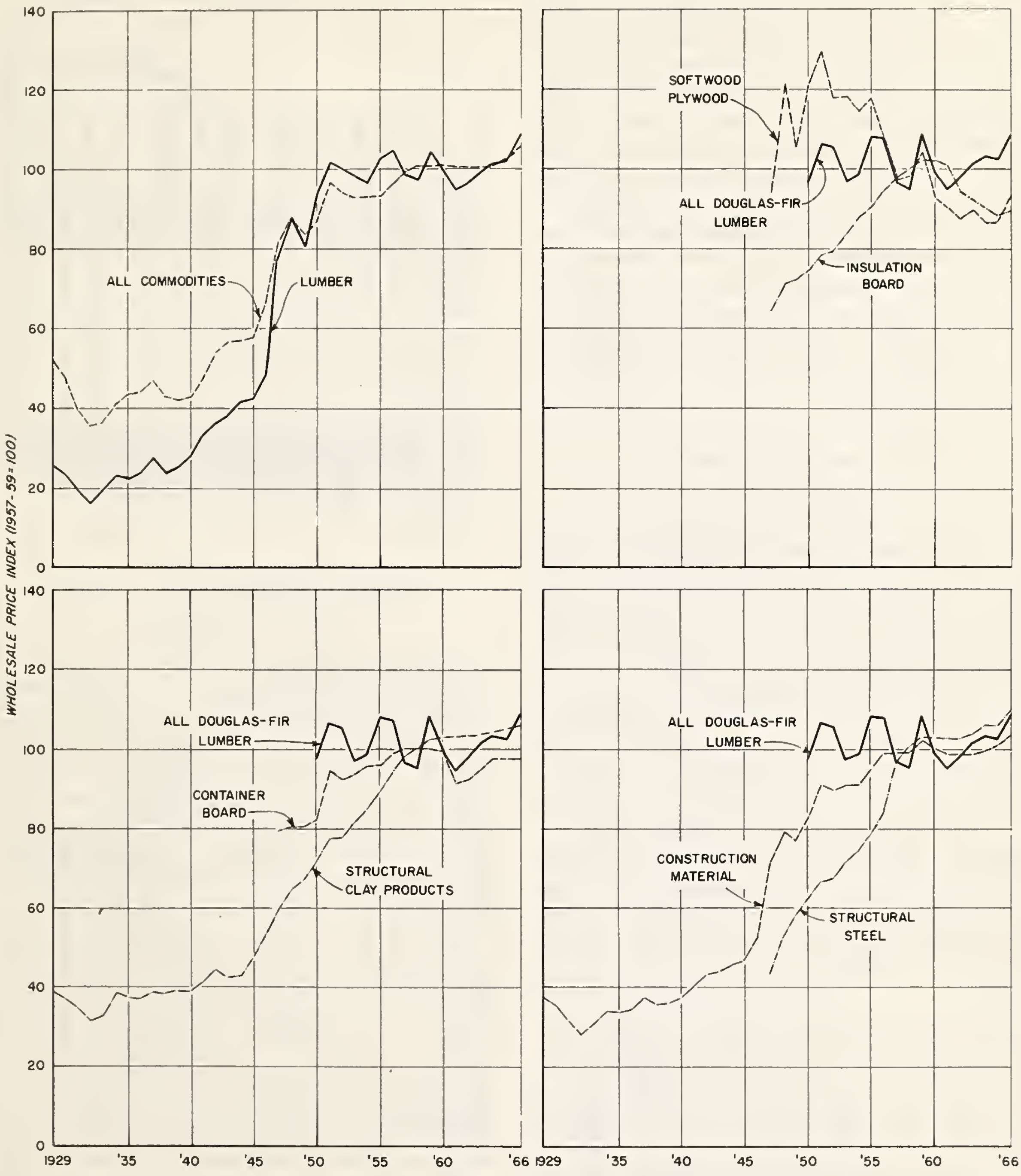
The changes in the sawmill industry have had some important effects on efficiency and marketing practices. For example, data from the Western Wood Products Association show that the output of lumber per man-hour of direct employment has risen from 25 to 30 percent in the last decade. In addition, the closing of the smaller mills and the shift of the cut to large mills, which are better equipped and managed, means that more of the Nation's lumber is being properly manufactured and more efficiently marketed.

Lumber prices declining after sharp rise in early 1966

There were large changes in lumber prices during the first part of 1966 (table 14, fig. 15). The wholesale price index (1957–59 = 100) of Douglas-fir rose from 102.9 in February to 114.1 in April. Prices of ponderosa pine and other western softwood species showed a similar trend. As new orders declined in early summer in response to the drop in the housing market, prices began to decline and in early fall were approaching beginning-of-the-year levels.

Southern pine lumber prices also rose rapidly in the early months, and after leveling off in May and June, started increasing again, reaching 109.4 in August. This is a record high—8 percent above the level at the beginning of the year and roughly 15 percent above that prevailing in the late 1950's and early 1960's.

Although some fluctuation has occurred, the wholesale price indexes for Douglas-fir and other western softwood species have held without significant change since 1951 (table 14, fig. 16). Prices of competing material showed variable trends (table 15). The wholesale price index for softwood plywood, the most important competing material, fell from 129.3 in 1951 to 82.2 in August. Prices of all construction materials, structural steel, and structural clay products increased in this period.



Not much change in lumber prices relative to all commodities and most competing materials in recent years

FIGURE 16

The price of insulation board also rose until about 1960, but has since declined. Container board prices increased in the early 1950's but have since maintained about the same level.

In August 1966 the wholesale price index of hardwood lumber was 127.5 (1957–59 = 100). This was about 6 percent higher than the January 1966 price index and 20 percent above that of January 1965. Hardwood lumber prices began rising in 1963. The increase was rather slow in 1963 and 1964, but rapid since then. Current hardwood lumber prices are substantially above those in the 1950's and early 1960's, when the index varied between 90 and 110.

In recent years the rapid growth in demand for hardwood lumber has been an important cause of rising prices. It is probable that growing competition for the available supplies of higher quality hardwood timber has also contributed to the rise.

Lumber imports and exports up in 1966

Imports of softwood lumber during the first half of 1966 were 2.6 billion board feet, about 12 percent above the same period in 1965. The general decline in demand and prices is expected to cause a decrease in the second half, and the year total will probably be about 5.2 billion board feet, 6 percent more than in 1965 (table 11, fig. 17). Imports of hardwood lumber during the first 6 months of 1966 were up 22 percent over the comparable period in 1965. On the basis of this trend the total for the year is estimated at 0.4 billion board feet.

Based on the trade in the first half of 1966, exports of softwood lumber are estimated at 0.9 billion board feet and hardwood lumber at 0.2 billion board feet (table 11, fig. 17). These volumes are 0.1 billion board feet above those of 1965.

Given the above trade levels, net lumber imports in 1966 will amount to 4.5 billion and compose about 11 percent of U.S. consumption. Net softwood lumber imports will be 4.3 billion board feet—about 13 percent of consumption. This volume of net softwood lumber imports has held without significant change since 1963. Net hardwood lumber imports are expected to be 0.2 billion board feet in 1966—about 2 percent of consumption.

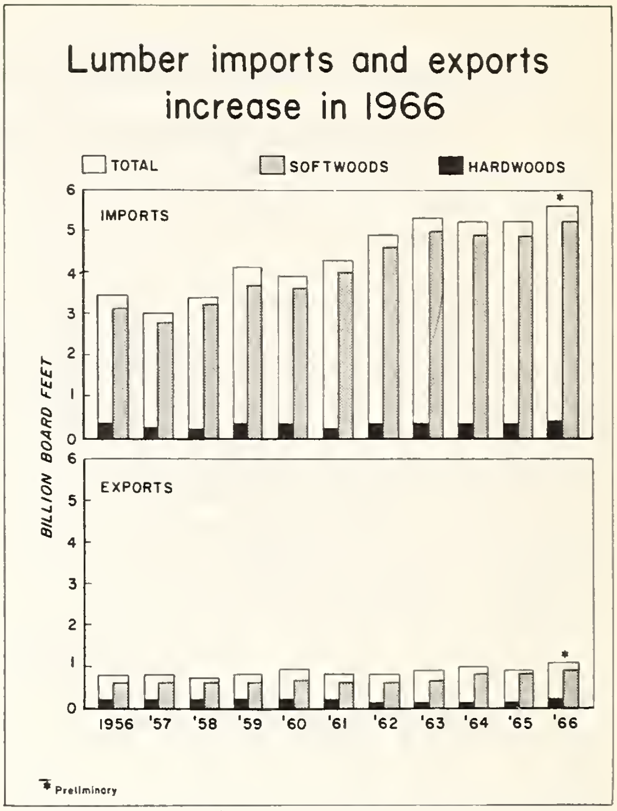


FIGURE 17

Canada is the source of nearly all of the softwood and a substantial part of the hardwood lumber imported into the United States (table 16). Softwood lumber production in Canada in 1965, the latest year for which official estimates are available, was 10.0 billion board feet (table 18). Over two-thirds of this total was cut in British Columbia. Hardwood lumber production, all in the eastern Provinces, was estimated at 0.5 billion board feet.

According to a recent study by the British Columbia Forest Service, the lumber industry has expanded into most of the Province where there are substantial amounts of suitable timber. In these areas the timber resource has been almost completely allocated, and the permissible cut fully committed. Since some decline in lumber production is expected in the coastal areas of the Province where industry has long been developed, the study concluded that little or no net increase in lumber production was likely in the developed parts of the Province.

Nevertheless, there is still an unused annual

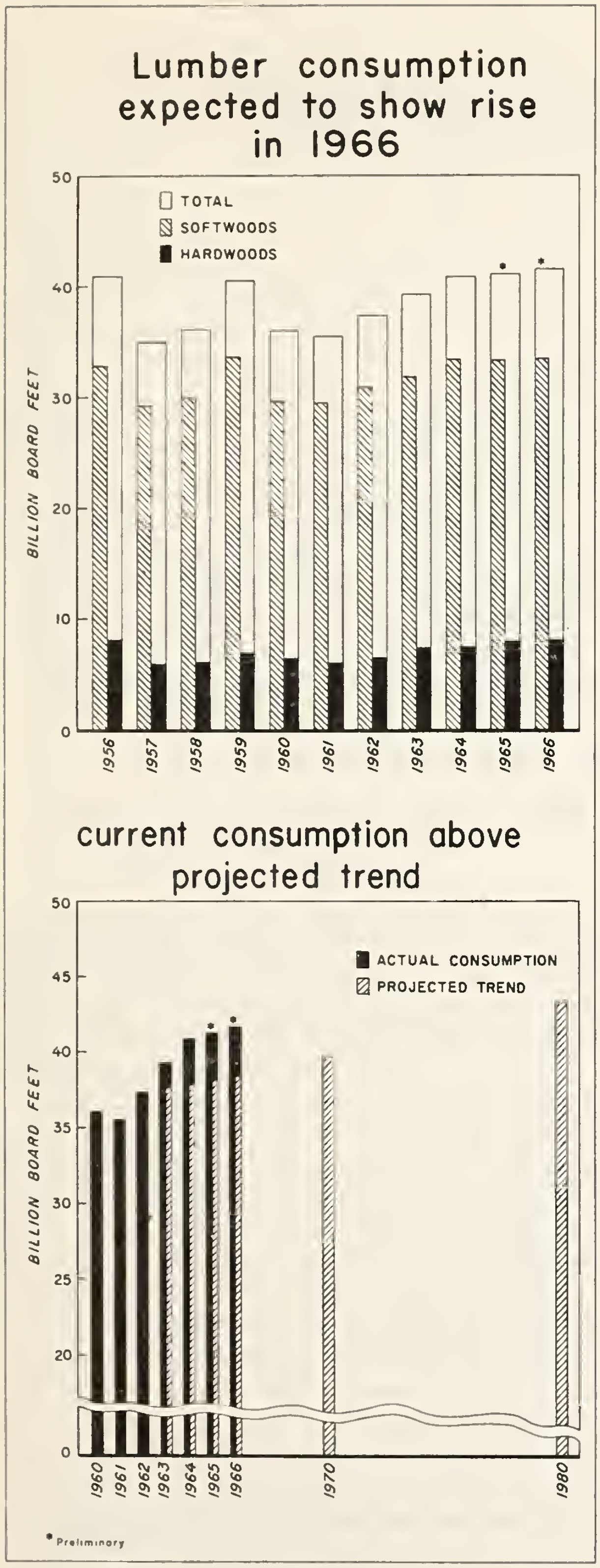


FIGURE 18

allowable cut of about 1.1 billion cubic feet in more remote parts of the Province. Timber supply and cost conditions in these areas indicate that primary exploitation will have to be undertaken by the pulp and paper industry. How much increase in lumber production can be economically attained remains to be determined.

Europe is the most important market for U.S. softwood lumber exports, although fairly large volumes, as well as most of the hardwood exports, move to Canada (table 17).

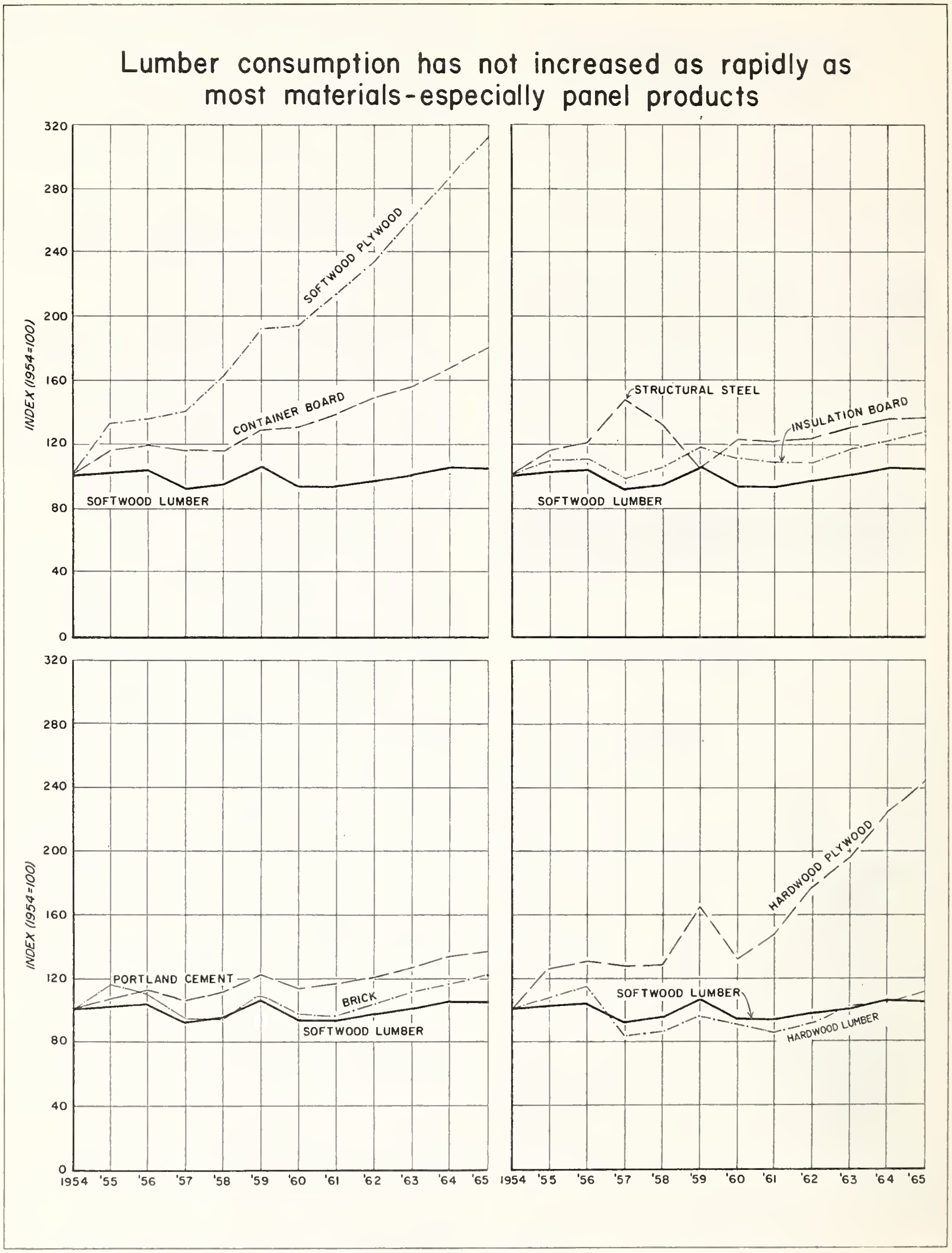
Lumber consumption estimated at 41.6 billion board feet in 1966—slightly above 1965

On the basis of trends in production and trade, it is estimated that lumber consumption in 1966 will be about 41.6 billion board feet (table 11, fig. 18). This is slightly above the 41.2 billion board feet used in 1965, and 9 percent more than the average annual consumption of 38.3 billion board feet in the last decade.

Softwood lumber consumption in 1966 is estimated at 33.5 billion board feet and hardwood lumber at 8.1 billion board feet— slightly above the 1965 levels of 33.3 and 7.9 billion board feet. The 1956–65 annual averages were 31.4 billion and 6.8 billion board feet respectively.

As illustrated in figure 18, lumber consumption since 1962 has been above the trend projection in the recent "Timber Trends" study (*31*). This is largely attributable to the stimulation of consumption by a rate of growth in economic activity and income much in excess of that projected at the time this study was made. Increase in the average size of dwelling units constructed (the average size of FHA-insured single-family houses in 1965 was 6 percent above 1962 (*8*)), which has been associated with the sharp rise in income, has been an important factor.

Although lumber use is rising, it has not been increasing as rapidly as most competing materials, especially softwood plywood and other panel products (table 19, fig. 19). This has been caused by basic changes in construction practices, manufacturing methods, and consumer tastes. In residential construction, for example, average use of lumber per dwelling unit dropped from 10,000 board feet in 1952 to 8,700 board feet in 1962. This was partly caused by the rapid rise in the relative importance of



Lumber consumption has not increased as rapidly as most materials-especially panel products

FIGURE 19

multifamily dwelling units (fig. 4), which on the average require only about two-fifths as much lumber as single-family units. Growth in the proportion of single-family houses built on concrete slab foundations, where girders, sills, and floor joists are eliminated, has been another factor in the decline in average lumber use per dwelling.

Part of the decline in lumber use per unit in the 1952–62 period was caused by substitution of other materials, particularly plywood and other wood-panel products. For example, between 1959 and 1962 the volume of lumber used for sheathing in new single-family houses inspected by the Federal Housing Administration declined from 956 board feet to 597 board feet. Plywood consumption for sheathing, on the other hand, increased from 922 to 1,217 square feet (3/8-inch basis) in the same period. Substantial displacement of lumber in subflooring also occurred.

The available data on the use of wood products in house components and the trend in total consumption suggest that much of the feasible displacement of lumber by plywood in sheathing and subflooring has already taken place (*32*). Lumber appears to be in a good competitive position in other components such as framing, which composes about three-fifths of average unit lumber use in single-family houses. Thus, the increasing size of dwelling units and the expected increase in housing starts anticipated in the late 1960's point to rising demands for lumber, especially for the softwood construction grades.

Most hardwood lumber is used to manufacture furniture and fixtures, flooring, pallets and containers; and for railroad ties, and dunnage and blocking (*33*). Because of the projected growth in population and income, which will augment demand for goods such as furniture and flooring and the associated demand for pallets, containers, and railroad ties, hardwood lumber use is expected to continue upward.

PULPWOOD PRODUCTION, PRICES, TRADE, AND CONSUMPTION

Pulpwood production expected to reach a high of 55 million cords in 1966—10 percent above 1965

Data for the first 7 months of 1966, as reported by the American Pulpwood Association (*3*), indicate that domestic pulpwood production in 1966 will be about 55 million cords. This is 10 percent above the 1965 level and 1.6 times output in 1956 (table 20, fig. 20).

Production of softwood roundwood in 1966 is expected to be 29.2 million cords—up 4 percent from the cut in 1965. Southern pine is the most important softwood species, composing about three-fifths of total output. Spruce, true firs, hemlock, jack pine, and Douglas-fir make up the remainder.

Hardwood roundwood production is estimated at 11.3 million cords in 1966, 14 percent above 1965 output. Soft-textured species such as the gums, aspen, yellow-poplar, and cottonwood account for most of the hardwood cut. But the use of hard hardwoods, such as oak, has been rising rapidly, and these species are now a substantial part of the hardwood production in some areas in the East. For example, about 73 percent of the hardwood roundwood produced in Virginia in 1965 came from hard hardwoods.

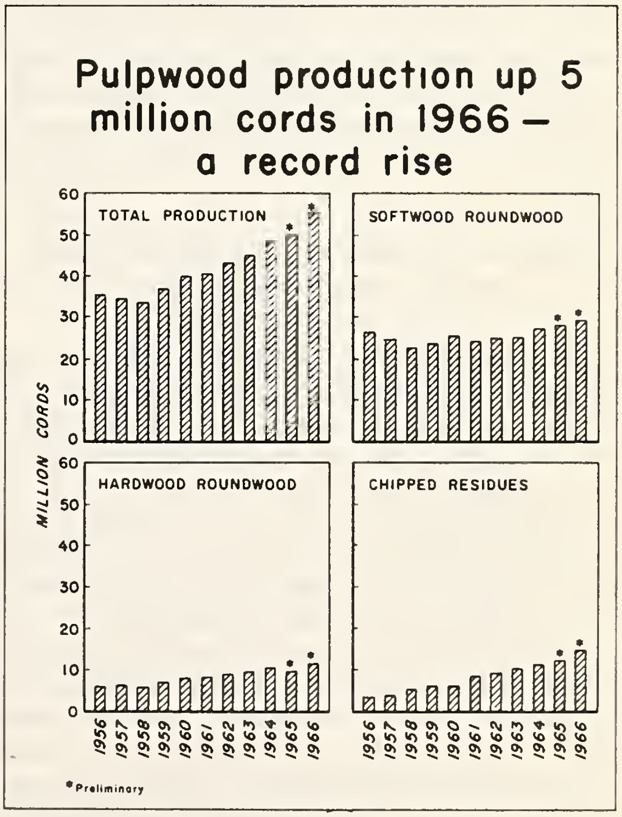


FIGURE 20

These hardwoods are most in demand at mills making semichemical pulp.

In the last decade hardwood roundwood production has been rising at an annual rate of 6.6 percent—about 3.5 times the rate for softwoods (1.9 percent). This reflects (1) the growing competition for softwoods, (2) the availability of large volumes of hardwoods at lower cost per ton of fiber than softwoods, and (3) the improvement of many grades of paper and board resulting from the addition of hardwood pulps.

Production of pulpwood chips, mainly from the plant byproducts of sawmills, veneer mills, and other wood-using industries, is estimated at 14.5 million cords in 1966—some 22 percent above the 1965 level. In the last decade, chip production has been rising by about 17.6 percent per year, about six times the 2.9 percent annual increase for roundwood. Because of the rapid growth in use, most of the coarser softwood plant byproducts such as slabs, edgings, and veneer cores that can be considered economically available are now being utilized for chips. There is still a substantial volume of unused coarse hardwood residues. There is also a large volume of sawdust and other fine residues, estimated at about 10 million cords in 1962, available for utilization. Recent technological advances in pulping may lead to much greater use of such material in the next few years.

Pulpwood production in the South estimated at 33.8 million cords in 1966—up 10 percent from 1965

It is expected that about 33.8 million cords of pulpwood, three-fifths of the U.S. total, will be produced in the South in 1966 (table 21, fig. 21). This is about 10 percent above the cut in 1965 and 1.7 times that in 1956.

Softwood roundwood production in the South in 1966, nearly all southern pine, is estimated at 21.0 million cords—1.2 times output in 1956. Production of hardwood roundwood is estimated at 7.0 million cords, 15 percent above the 1965 level and 2.5 times that in 1956. About three-fifths of the 1965 harvest came from soft hardwoods, chiefly the gums. Oak, a hard hardwood, accounted for most of the remainder.

Chip production in the South is expected to be about 5.8 million cords in 1966 (fig. 22). This is about 12 percent above 1965 production and some 5 times the level of a decade ago. The available data indicate that there is only a small volume of unused pine residues at those southern sawmills large enough to install the necessary barking and chipping equipment. A growing part of the chips produced in recent years has come from hardwoods and from plants that bark and chip roundwood at locations away from pulpmills. Veneer log cores from softwood plywood plants are becoming a significant source of chips.

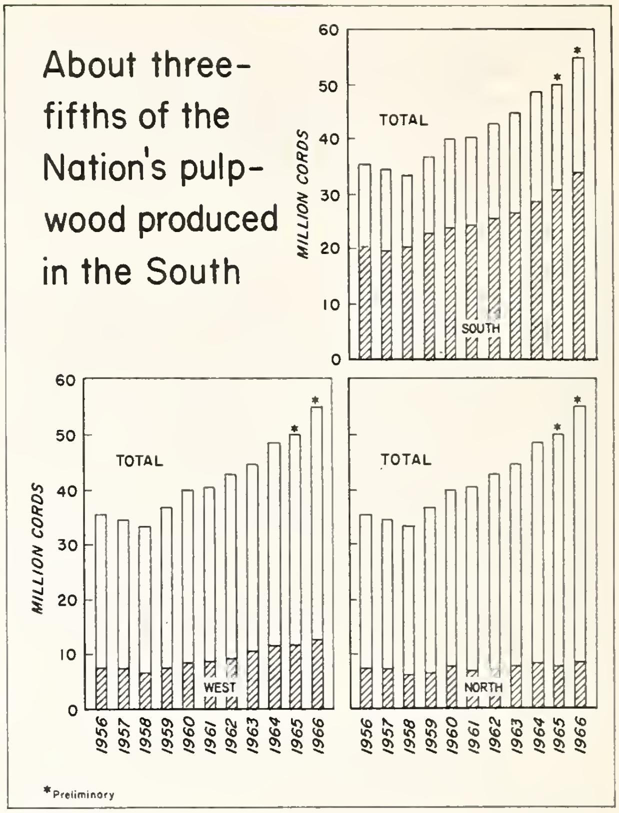

About three-fifths of the Nation's pulpwood produced in the South

FIGURE 21

1966 pulpwood cut in West estimated at 12.5 million cords—11 percent higher than in 1965

Pulpwood production in the West in 1966 is estimated at 12.5 million cords, or about 11 percent above the 1965 level (table 21, fig. 21). Chip production from plant byproducts is expected to be about 7.8 million cords—62 percent of the total output (fig. 22). Most of the production of roundwood in the West is from softwoods, but production of hardwood round-

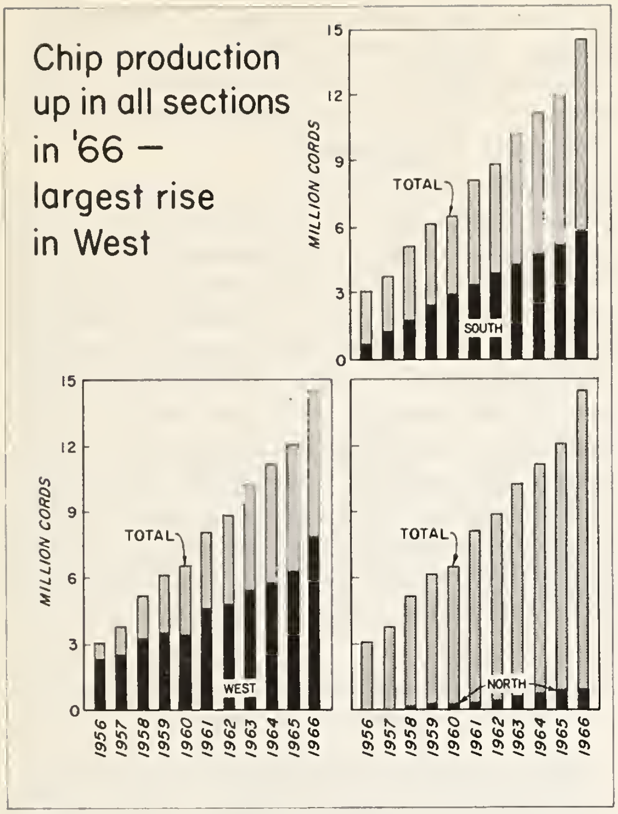


FIGURE 22

wood, largely from alder, is expected to be about 0.6 million cords in 1966.

Pulpwood output in the North expected to be 8.7 million cords—0.9 million cords higher than in 1965

Pulpwood production in the North is estimated at 8.7 million cords in 1966 (table 21, fig. 21). This is 0.9 million cords above output in 1965 and three quarters of a million cords above the 1961–65 average. Most of the increase in pulpwood harvest in the North since 1960 has been composed of hardwoods. Aspen is the most important species harvested, but in recent years a growing part of the cut has been the dense hardwoods such as birch, maple, beech, and oak.

Use of chipped residues in the North has increased from about 69,000 cords in 1954 to an estimated 0.9 million cords in 1966 (fig. 22). There are still substantial volumes of unused wood residues at manufacturing plants in the North, and further growth in the use of these residues is likely.

Pulpwood prices rose in 1965 and fragmentary data indicate further increases in 1966

There were general increases in pulpwood prices in the latter part of 1965 and early 1966 (table 22, fig. 23). In the Midsouth, for example, the price of southern pine roundwood increased from $15.90 per cord in 1964 to an estimated $17.00 in 1966. Hardwood roundwood prices rose from $13.15 per cord to $14.50. Fragmentary data indicate that the price increases, the first since the early 1950's, occurred in most parts of the country and for most species.

Pulpwood prices vary considerably by region and species, as illustrated in the tabulation below:

Species	*State*	*Price per rough cord*
Southern pine	Louisiana (*13*)	[1] $15.60–$16.75
Southern hardwood	do	[1] 14.75
Spruce and fir	New Hampshire (northern) (*6*)	[2] 20.00– 25.00
Hardwood	do	[2] 17.00– 18.00
Aspen	Minnesota (*17*)	[1] 8.00– 11.50
Balsam fir	do	[1] 14.00– 20.00
Spruce	do	[1] 21.00– 26.00
Cottonwood	Oregon (Multnomah and Clackamas counties) (*20*)	18.00
Douglas-fir	do	17.00– 18.00
Alder	Washington (*56*)	[2] 15.00

[1] F.o.b. car.

[2] Delivered at mill.

Pulpwood imports rise in 1966—exports up sharply

Trends in imports of pulpwood during the first 7 months of 1966 indicate that the total for the year will be about 1.5 million cords—about 15 percent higher than in 1965 and slight-

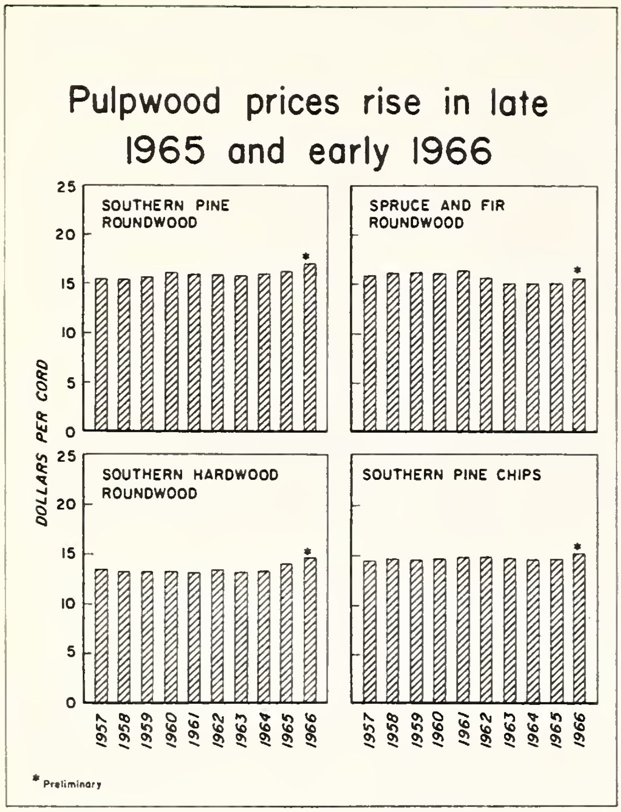


FIGURE 23

ly above the annual average in the 1956–65 period. Most of the pulpwood imports were from Canada, but in recent years substantial quantities (181 thousand cords in 1965) have come from the Bahamas.

Exports of pulpwood are estimated at 0.3 million cords—just about double those of 1965 and about 2.5 times the average level in the 1956–65 decade. The increased exports have consisted of chips going to Japan. This trade began in 1965 when chip handling facilities were installed in Coos Bay, Oregon where there were large quantities of wood residues from sawmills and other primary wood processing plants. The continued availability of substantial volumes of such residues and Japanese needs for wood imports indicate that chip shipments are likely to continue to grow rapidly in the period immediately ahead (*4*).

Trade in wood pulp, paper, and board rising fast in 1966

The United States maintains extensive trade in wood pulp, paper, and board. The extent of this trade in 1965 is shown in the tabulation below:

Item	*Imports*			*Exports*		
	Total	*Canada*	*Other*	*Total*	*Canada*	*Other*[1]
			(*Thousand*	*tons*)		
Wood pulp	3,130	2,820	310	1,402	87	1,315
Paper:						
Newsprint	6,323	6,084	239	84	6	78
Other	183	103	80	573	69	504
Total	6,506	6,187	319	657	75	582
Board:						
Container board	5	--	--	793	16	777
Other	13	--	--	153	42	111
Total	18	6	12	946	58	888
Construction paper and board	246	63	183	29	12	17
Total, all grades of paper and board	6,770	6,256	514	1,632	145	1,487

---

[1] Most of the wood pulp and paper and board exports go to western Europe and Japan.

During the first 6 months of 1966 imports of wood pulp were up 6 percent, and paper and board items, chiefly newsprint, were up 15 percent over the corresponding period in 1965 (*1*, *16*, *54*). Exports increased as follows: 10 percent for wood pulp, 13 percent for container board, and 3 percent for all other grades of paper and board.

By far the largest part of U.S. imports of wood, paper, and board are from Canada. Most exports move to Western Europe and the Far East, mainly Japan. Recent FAO studies of these and other regions of the world (*24*, *25*) indicate that substantial increases in demand for wood pulp, paper, and board are in prospect (see tabulation below).

Region	Projected demands for paper and board 1965	Projected demands for paper and board 1975	Projected pulp requirements 1965	Projected pulp requirements 1975
	(Million short tons)			
Western Europe (*24*)	26.4	40.6	19.0	29.3
Latin America (*25*)	3.8	7.2	3.3	6.1
Far East (*25*)	7.6	15.2	6.2	12.5
All other (except North America (*25*)	17.2	35.5	15.0	31.8

The FAO studies also show that timber supplies in Western Europe and Japan, the major markets, will not be large enough to meet the demands of wood-using industries. This means that these areas must turn to an increasing degree to outside sources of supply for wood pulp, paper, and board. The United States, Canada, and the U.S.S.R. are the only countries with large volumes of softwood timber suitable for use by the pulp and paper industries. Canada is likely to be the major U.S. competitor in world pulp and paper markets. The best available evidence indicates that the remote location and lack of access to the unexploited forests in the U.S.S.R. and the growing pressure for increasing domestic consumption are formidable barriers to any substantial expansion of pulp and paper exports from that country. FAO studies also indicate that tropical hardwood forests, sometimes mentioned as major potential sources of pulp and paper, are not likely to be exploited until the cost of pulpwood from temperate zone forests and plantations rises sharply—something that is not likely in the years immediately ahead.

In view of the above, it seems reasonable to expect that exports of paper and board will rise roughly in proportion to demand in various regions of the world. Exports of wood pulp are likely to grow more rapidly than wood pulp needs in the major consuming areas, because timber shortages will force many countries to import an increasing proportion of the wood pulp consumed in their paper and board mills.

Although exports are likely to show fast growth, imports are also expected to increase. Thus, the United States is likely to remain a net pulp and paper importing nation for some time.

Pulpwood consumption in U.S. mills estimated at 55.8 million cords in 1966—5.1 million cords higher than in 1965 and a new record

Trends during the first 7 months indicate that pulpwood consumption in U.S. mills will be about 55.8 million cords in 1966 (table 20, fig. 24). This is a record figure exceeding 1965 consumption by 10 percent. The increase in the volume used in 1966—5.1 million cords—is also a record and 3 times the average annual rise of 1.7 million cords in the 1956–65 period (fig. 24).

Because economic activity and income have increased much more rapidly than the projections available in the early 1960's indicated, pulpwood consumption is now substantially above the trend level projection in the recent Forest Service report *Timber Trends in the United States* (*31*) (fig. 24). In view of the wave of expansion that is underway in the pulp and paper industry and the presently anticipated increases in population, economic activity, and income, further rapid growth is expected.

Growth in the demand for pulpwood is not likely to be uniformly distributed among the various sections of the country. This is illustrated by the increases in consumption during the first 7 months of 1966 shown in the tabulation below:

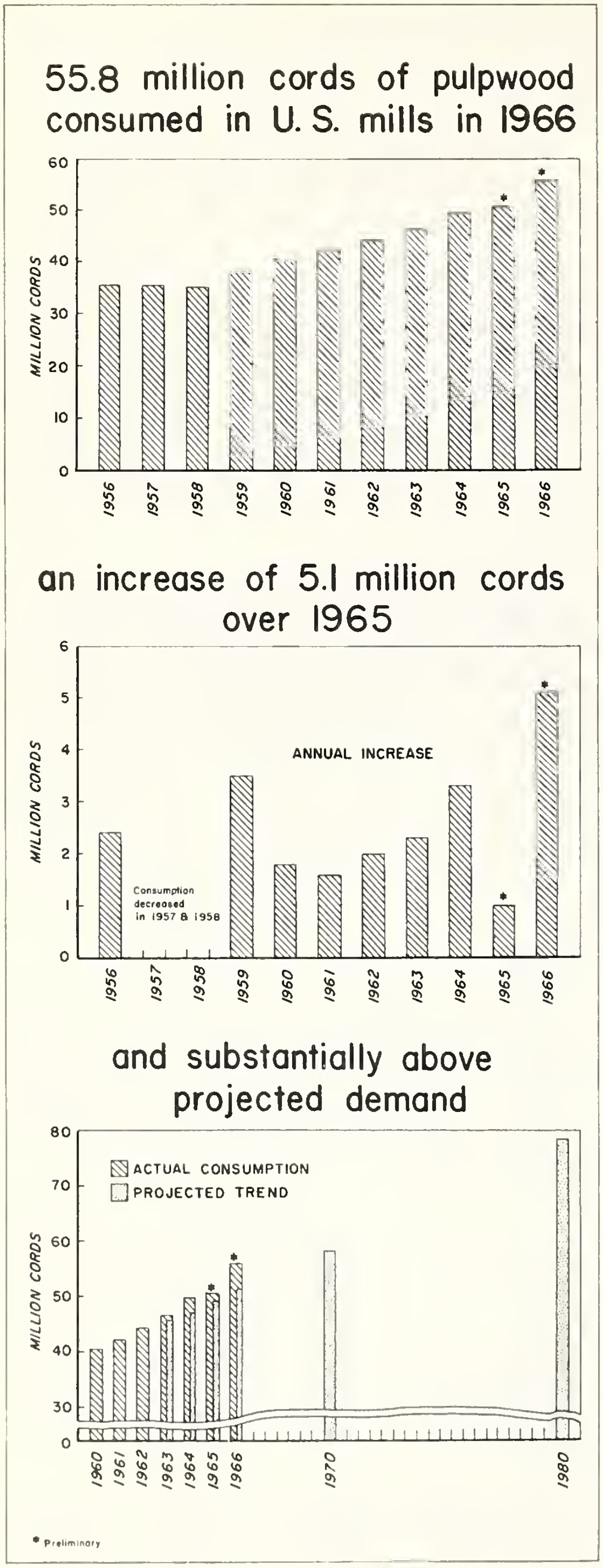
Region	First 7 months 1965	First 7 months 1966	Percent 1965 to 1966
	(Thousand cords)		
North:			
Northeast	2,811	3,082	+ 9.6
North Central	2,676	2,781	+ 3.9
Total	5,487	5,863	+ 6.9
South:			
South Atlantic	10,351	11,355	+ 9.7
South Central	7,017	7,808	+11.3
Total	17,368	19,163	+10.3
West, total	6,329	7,156	+13.1
United States total	29,184	32,182	+10.3

These differences are likely to continue in the years immediately ahead, with the largest growth in volume in the South. It has been recently estimated, for example, that the mills in that section will have the capacity to use an additional 6 million cords of wood by 1968 (*5*). Supplying such a volume will place a tremendous burden upon the timber, equipment, and labor resources of the area.

Growth in the demand for pulpwood in the South, along with the rising demands of other wood-using industries, may soon increase competition for wood to the point where more new wood pulp capacity will be located in other sections of the country. There are still large supplies of unused hardwood timber available in the North and of softwood timber in the Rocky Mountains. These sections, especially the North where most of the major pulp and paper markets are located, may be the areas where the next major wave of expansion in the pulp industry takes place.

Total pulpwood consumption in U.S. estimated at 66.8 million cords in 1966—11 percent above 1965

When the pulpwood equivalent of the net imports of pulp, paper, and board is added to the volume of wood expected to be consumed in U.S. pulpmills, it appears that total pulpwood consumption in the U.S. will be 66.8 million cords (table 20). This is the total amount of wood needed to meet the Nation's demand for paper and board; and for nonpaper products, such as rayon and cellophane, that are made from wood pulp. The volume in 1966 is 11 percent more than in 1965 and nearly 1.5 times consumption in 1956.


55.8 million cords of pulpwood consumed in U. S. mills in 1966

an increase of 5.1 million cords over 1965

and substantially above projected demand

FIGURE 24

PLYWOOD AND VENEER LOG PRODUCTION, PRICES, TRADE, AND CONSUMPTION

Softwood plywood production up 6 percent in 1966—hardwood plywood shows 9 percent rise

Softwood plywood production is expected to be about 13.1 billion square feet (3/8-inch basis) in 1966, some 6 percent above that in 1965 (fig. 25). During the late winter and early spring output rose rapidly (*2*) in response to (1) forward buying in anticipation of production shutdowns from labor disputes, (2) military procurement, and (3) a seasonal rise in purchases by contractors, wholesalers, and retailers. After new labor contracts were signed, orders and production began to fall off because of the decline in the residential construction market—a major source of demand for softwood plywood. Further declines in this market are expected to continue to have a depressing effect on softwood plywood production in the months immediately ahead.

Hardwood plywood production in 1966 is estimated at 2.5 billion square feet (surface measure)—about 9 percent higher than in 1965 (fig. 25). In the 1950's there was no trend in annual hardwood plywood production and output averaged 1.5 billion square feet a year. Since 1960, however, production has been increasing by about 10 percent per year.

Plywood prices in July near 1965 levels

The wholesale price index of softwood plywood was 82.2 (1957–59 = 100) in August 1966 (table 14, fig. 26). This was 4 percent below the 1965 level and 20 percent under the high reached in April 1966. The rapid increase in prices which occurred in early 1966 (from 89.4 in January to 103.3 in April) reflected the abnormal buying situation described above. This is not expected to have a continuing influence.

As illustrated in figure 16, there has been a slow downward trend in softwood plywood prices since the early 1950's. There has also been a decline in softwood plywood prices relative to competing materials such as lumber and container board. Part of the very fast rise in the use of softwood plywood (including the substitution for lumber), which occurred in the 1950's and early 1960's, can be attributed to these changes in relative prices.

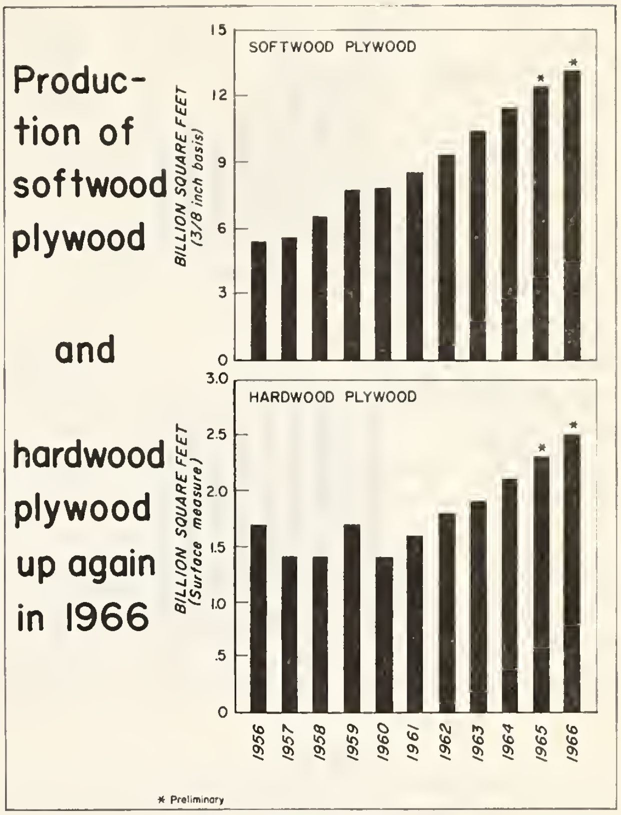


FIGURE 25

The wholesale price index of hardwood plywood in August was 99.2 (1957–59 = 100), about 1 percent above the 1965 level (table 14, fig. 26). Although some fluctuation has occurred, current hardwood plywood price levels have been maintained without significant change in recent years.

No significant trade in softwood plywood—hardwood plywood and veneer imports continue to rise

In 1965 imports of softwood plywood were 5 million square feet (surface measure) and exports 30 million square feet—insignificant volumes in relation to production and consumption (table 23). In contrast, hardwood plywood imports in 1965 were 2.1 billion square feet

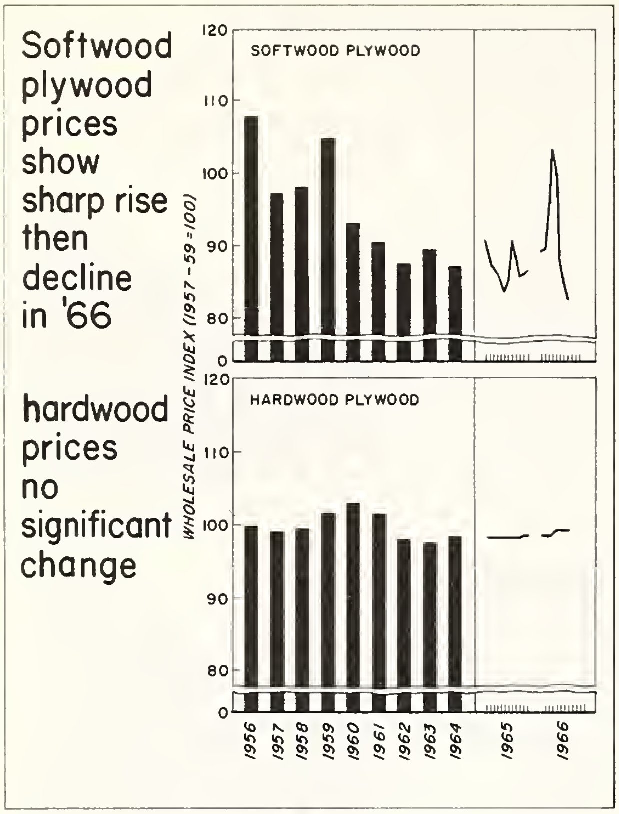


FIGURE 26

(surface measure), 10 percent more than in 1964 and 3.4 times imports in 1955 (table 23). Rapid growth was continuing during the first 5 months of 1966 (20 percent above 1965), and imports for the year are estimated at 2.5 billion square feet.

Hardwood veneer imports in 1965 were 2.0 billion square feet (surface measure) (table 24). This was 13 percent above 1964 and 2.6 times imports in 1955. Trends in the early months of 1966 indicate a rise of about 8 percent for the year.

Most of the increase in hardwood plywood imports has been in luans and other tropical hardwoods, although imports of birch and maple plywood have also risen substantially. Until 1957 nearly all of the growth in hardwood plywood imports came from Japan (table 25, fig. 27). Since then, however, imports from Japan have been fluctuating around 700 million square feet a year, and most of the recent increases have originated in the Philippines, Taiwan, and Korea.

Birch and maple compose about two-fifths of the hardwood veneer imports, and tropical species most of the remainder (table 24). Canada was for a long time the most important source of hardwood veneer imports, supplying nearly all of the birch and maple. Since the late 1950's imports from other areas, particularly the Philippines and Africa, have grown rapidly, and these areas now supply three-fifths of the total imports (table 26, fig. 28).

U.S. exports of hardwood plywood have not been significant (7 million square feet in 1965) in recent years. Hardwood veneer exports averaged a little over 60 million square feet a year in the late 1950's and early 1960's. By 1965, however, exports had increased to well over a hundred million square feet.

Softwood plywood consumption to increase 6 percent in 1966—significantly below the average rate of increase in the last decade

Softwood plywood consumption in 1966 is estimated at 13.1 billion square feet (fig. 19).

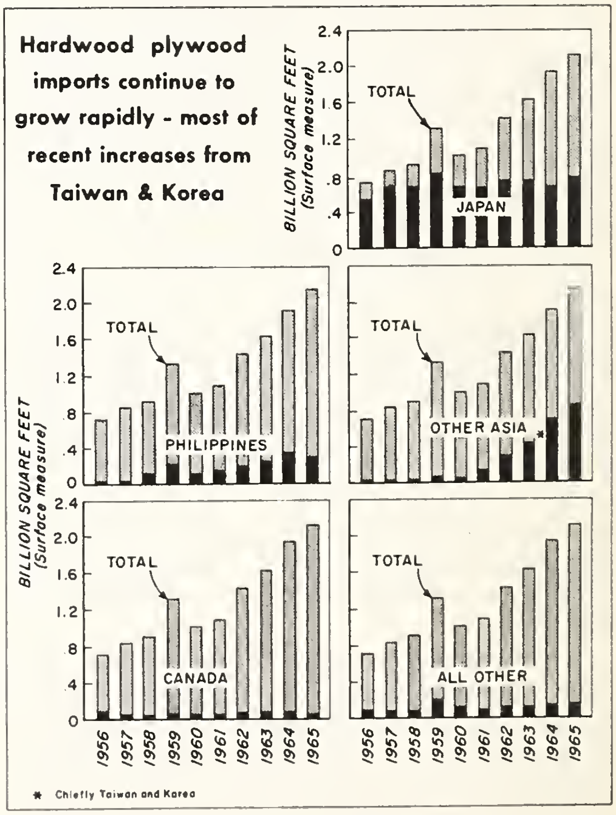


FIGURE 27

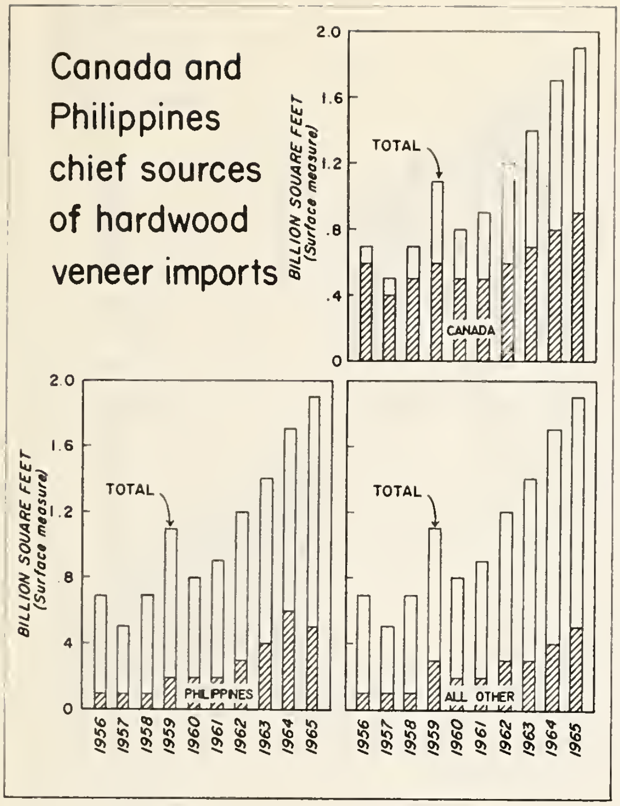


FIGURE 28

This is 6 percent above 1965 consumption but below the annual rate of increase of 8.9 percent which prevailed in the 1956–65 decade. Per capita consumption is up 5 percent in 1966—a rate that is also substantially below the annual average of 7.2 percent in the years 1956 through 1965. Increases in use in 1965 over 1964—8 percent in total consumption and 7 percent in per capita—were also below the annual averages of the preceding decade.

Part of the decline in the rate of rise in consumption in 1966 was caused by the decrease in residential construction—the market for over half of the softwood plywood consumed. It also reflects some falling off in the amount of substitution for other materials. A large part of the very rapid growth in consumption in the 1950's and early 1960's was attributable to substitution of softwood plywood for lumber, particularly in sheathing and subflooring in residential construction and in concrete formwork in nonresidential construction. Data obtained from recent studies indicate that most of the potential substitution has taken place. This suggests that the high rates of increase in consumption that have held for the last decade or so are likely to slacken off in the next few years, especially in per capita use. Total use of softwood plywood is expected to continue to rise but more in line with increases in construction and manufacturing.

Hardwood plywood consumption up 13 percent in 1966—a continuation of recent trend

Hardwood plywood consumption in 1966 is estimated at 5 billion square feet (surface measure) (fig. 19). This is about 13 percent above consumption in 1965 and more than double the level of a decade ago. Per capita use in the past decade has increased from 14 square feet to 25 square feet.

Anticipated growth in personal income and the associated demands for fine furniture, paneling, and other products where hardwood plywood is used indicate further increases in consumption.

Softwood veneer log production expected to be 5.7 billion board feet in 1966—6 percent above 1965

On the basis of expected increases in softwood plywood and veneer consumption, it is estimated that softwood veneer log production in 1966 will be about 5.7 billion board feet (table 27, fig. 29). This exceeds the 1965 cut by 6 percent and is 2.3 times the output of 10 years ago.

Douglas-fir composed about four-fifths of all the logs used in the manufacture of softwood plywood and veneer in 1965. An increasing variety of other softwoods is being utilized, however, including western hemlock, western pines, larch, true firs, redwood, cedar, and southern pine.

The use of southern pine logs for plywood has been growing rapidly since 1964, when the first southern softwood plywood plant started production. There are now 30 such plants with a combined annual capacity of almost 2.2 billion square feet operating or under construction, as shown in the following tabulation.

Name	*Location*	*Estimated annual capacity (million sq. ft., 3/8-inch basis)*
Operating:		
A. DeWeese Lumber Co.	Philadelphia, Miss.	30
Chesapeake Corp.-U.S. Plywood	Pocomoke City, Md.	50
Columbia Southern Plywood Co.	Minden, La.	60
Delta Plywood Co.	Beaumont, Miss.	90
Georgia-Pacific Corp.	Crossett #1, Ark.	130
Georgia-Pacific Corp.	Crossett #2, Ark.	130
Georgia-Pacific Corp.	Emporia, Va.	100
Georgia-Pacific Corp.	Fordyce, Ark.	120
Georgia-Pacific Corp.	Louisville, Miss.	90
Hunt Lumber Co. (La. Plywood Corp.)	Dodson, La.	85
Kirby Lumber Corp.	Silsbee, Tex.	35
Olin Mathieson	Winnfield, La.	60
Owens-Illinois	Keltys, Tex.	65
Prescott Products Corp.	Elizabeth City, N.C.	25
Santiam-Southern Co.	Ruston, La.	55
Scotch Plywood Co.	Fulton, Ala.	45
So. Pine Plywood Co.-U.S. Plywood	Diboll, Tex.	80
Vancouver Plywood Co.	Florien, La.	120
Vancouver Plywood Co.	Oakdale, La.	100
U.S. Plywood	Holden, La.	80
Weyerhaeuser Co.	Jacksonville, N.C.	60
Weyerhaeuser Co.	Plymouth, N.C.	70
Total		1,680
Under construction:		
Arkansas-Louisiana Gas Co.	Gurdon, Ark.	100
Chesapeake Corp.-U.S. Plywood	West Point, Va.	50
Georgia-Pacific Corp.	Gloster, Miss.	90
Georgia-Pacific Corp.	Savannah, Ga.	65
Ocala Lumber Sales Co.	Ocala, Fla.	50
Owens-Illinois	Natchitoches, La.	60
Tremont Lumber Co.	Joyce, La.	60
Triangle Plywood Corp.	Moncure, N.C.	60
Total		535

The additional wood needs of these plants and those producing wood pulp, lumber, and other products have been substantial and have had an important impact on growth-cut timber balances in many areas in the South.

Hardwood veneer log production estimated at 925 million board feet in 1966—6 percent above 1965

It is estimated that hardwood veneer log production in 1966 will be about 925 million board feet—6 percent above the 1965 cut (table 27, fig. 29). In the last decade and a half output has fluctuated between 0.8 billion and 1.0 billion feet a year.

In 1963, the latest year for which species data are available, sweetgum was the most important domestic hardwood veneer log species, composing 25 percent of the cut. Other important species, in terms of volume, were tupelo and blackgum, yellow-poplar, oak, birch, and maple. Black walnut, the most highly prized veneer log species in the United States today, accounted for only 3 percent of total veneer log production in that year.

The forests of the Southeast were the source of nearly half of the hardwood veneer logs

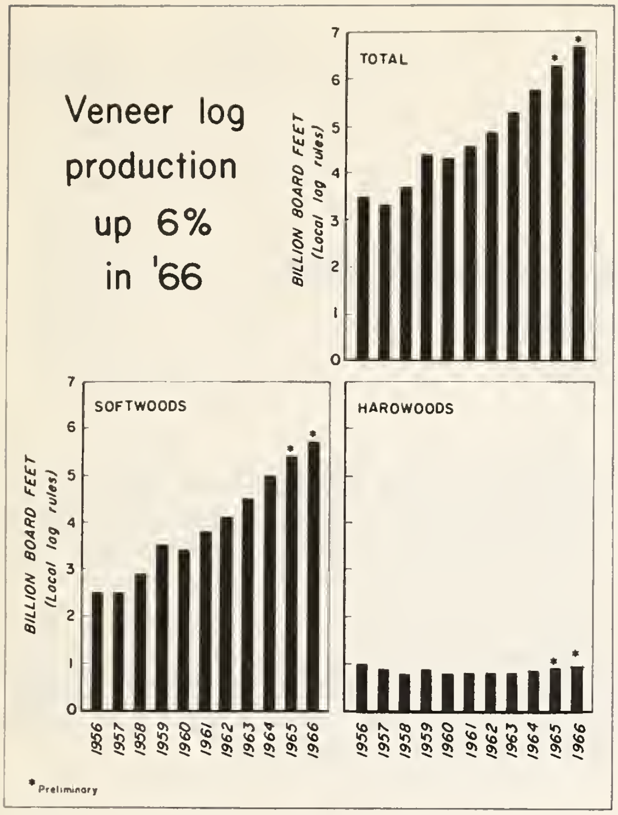


FIGURE 29

produced in 1963. About a quarter of the total was cut in the Midsouth. The remaining production came from the Northeast and Lake and Central regions. These northern forests were the primary source of many high-value species such as yellow-birch, black cherry, hard maple, and black walnut.

Veneer log prices rising

Prices of Douglas-fir peeler logs (veneer logs) in Washington have shown an upward trend since 1962 (table 7, fig. 8). Fragmentary data in some State forest product price reports indicate that veneer log prices of other species, especially hardwoods, have also been moving upward. These increases and the rapid growth in hardwood plywood and veneer imports suggest that the veneer and plywood industries are having difficulty in obtaining veneer logs of the kinds and qualities needed.

As illustrated in the tabulation below, veneer log prices vary widely depending on species, quality, markets, and other factors.

Species	*State*	*Price per thousand board feet*
Walnut	Illinois (*12*)	[1] $400.00–$800.00
Bottomland hardwoods	do	[2] 40.00– 70.00
Douglas-fir:		
No. 1 peelers	Oregon (Lane County) (*20*)	125.00– 135.00
No. 2 peelers	do	110.00– 125.00
No. 3 peelers	do	90.00– 100.00
Peelable mill logs	do	75.00
Douglas-fir, grade 1 logs	Washington (*56*)	[3] 114.00
Hemlock	do	[3] 65.00

[1] Face veneer quality logs, f.o.b. mill.
[2] Container veneer quality logs, f.o.b. mill.
[3] Delivered at mill.

PRODUCTION AND PRICES OF MISCELLANEOUS TIMBER PRODUCTS

Production of miscellaneous industrial timber products stable

The production of miscellaneous industrial roundwood products, i.e., cooperage logs, poles and piling, fenceposts, mine timbers, and an assortment of other products such as hewn ties, box bolts, excelsior bolts, turnery bolts, shingle bolts, charcoal wood, and farm poles, is expected to be approximately 460 million cubic feet in 1966 (table 2). This is the same as 1965 production and represents about 4 percent of all roundwood produced.

The relative importance of each of the miscellaneous industrial products in terms of output from roundwood is shown below for 1952 and 1962—the only recent years for which data by product are available.

Product	*Standard unit of measure*	*1952*	*1962*
Cooperage	Million board feet	355.3	283.0
Piling	Million linear feet	41.2	41.5
Poles	Million pieces	6.5	6.7
Posts	do	306.0	168.7
Mine timbers	Million cubic feet	81.0	48.4
Other industrial products	do	235.2	157.6
All miscellaneous products	do	698.8	465.4

Total output of these products declined about a third between 1952 and 1962. Individual products, however, showed divergent trends.

Fuelwood production continues slow decline

Round fuelwood production in 1966 is estimated at 1.1 billion cubic feet—about the same as the volume produced in 1965. Fuelwood consumption dropped sharply in the first five decades of the present century because of the substitution of oil, gas, coal, and electricity in home cooking and heating and industrial uses. However, in recent years substantial markets have developed in metropolitan areas for fireplace wood, and the expected increases in income, population, and residential construction indicate these markets are likely to continue to grow.

Scattered price information available for miscellaneous timber products

Some scattered price information is available for a number of miscellaneous industrial timber products in States where their production is important. Illustrative recent price quotations for selected products and species are as follows:

Product	*State*	*Unit of measure*	*Price*
Charcoal wood, unpeeled hardwood	Ohio (*19*)	Ton	[1] $ 2.80–$ 3.00
Cooperage (white oak):			
Heading bolts	Illinois (*12*)	Chord foot	[2] .50– .80
Stave bolts	do	do	[2] .80– 1.25
Heading bolts	Missouri (*14*)	do	[2] .25– 1.25
Stave bolts	do	do	[2] .50– 1.90
Fenceposts:			
Cedar	Kentucky (*55*)	Each	[1] .30– 1.00
Locust	do	do	[1] .35– 1.25
Mine timbers:			
Oak	West Virginia (*57*)	M. bd. ft.	[2] 34.20
Poles:			
Southern pine	Louisiana (*13*)	30-ft. poles	[3] 2.40– 3.50
		50-ft. poles	[3] 13.00– 17.35
		70-ft. poles	[3] 49.00– 53.25
Douglas-fir	Washington (*56*)	60-ft. poles	[2] 24.60
		90-ft. poles	[2] 54.90

[1] Delivered at local points.

[2] F.o.b. mill.

[3] F.o.b. right-of-way.

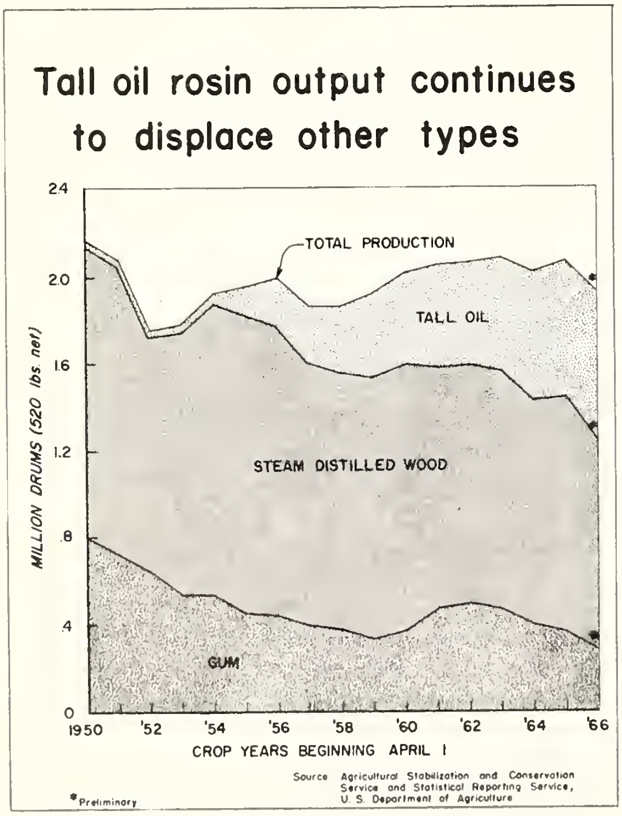
The fragmentary data that are available indicate that the prices of most of these products have been rising generally in line with trends in log prices shown in figure 8.

NAVAL STORES PRODUCTION, PRICES, TRADE, AND CONSUMPTION

Domestic production declines

Domestic production of all types of rosin in the 1966 crop year ending March 31, 1967, is estimated at 1,925,000 drums. This is a decline of about 7 percent from 1965 and the lowest level since 1959 (fig. 30). Production of all types of domestic turpentine in 1966 is estimated to approximate 679 thousand barrels, about the same as in 1964, but about 3 percent below 1965 output.

Sulfate naval stores continues to displace gum and steam distilled types. During 1966, rosin production is expected to divide percentagewise about 35-14-51 among sulfate, gum, and steam distilled sources. The corresponding proportion of anticipated turpentine output is 66-12-22.



Source Agricultural Stabilization and Conservation Service and Statistical Reporting Service, U. S. Department of Agriculture

*Preliminary

Figure 30

Scarcity of labor compounded by increasing wage rates and slightly lower crude gum prices is expected to reduce gum rosin production by about one-fourth, or 90 thousand drums. A similar reduction is anticipated for gum turpentine. At current and prospective price levels for the next few years, output is likely to continue declining unless USDA research leads to significant breakthroughs in cost or in large scale uses for crude pine gum, as distinct from rosin and turpentine.

Cost and price considerations also were paramount in the suspension this year of operations by several small steam distilled plants. This action should reduce steam distilled wood rosin output by about 9 percent—or 100 thousand drums. SD turpentine output is likely to be down at least 10 percent. A continued downward trend is to be expected as stump supplies are depleted or stump removal and transportation costs increase.

Moreover, continued expansion of tall oil rosin is expected to influence reduction of SD production. Several SD producers also produce tall oil rosin and are increasing capacity of their fractionating plants.

Production of tall oil rosin is estimated to increase by about 50,000 drums in 1966 crop year. This 8 percent increase over 1965 is in line with the annual growth rate for the past 6 years. Annual output increase rate for domestic sulfate turpentine continues at about 5 percent.

Rosin prices more competitive, turpentine steady

The ATFA export sales program has, for all practical purposes, established a two-price system for gum rosin. Actually such dual pricing also is in effect on tall oil and SD wood rosin. The ATFA sales program has made export prices of the medium U.S. rosin grades fully competitive with prices for European gum rosin. During the program year 1966 through mid-September 1966, ATFA sales exceeded program loan receipts. ATFA sales of rosin for export are expected to be expanded substantially in 1967 at prices fully competitive in the world market.

The domestic price of gum rosin during the 1965 crop year averaged $10.36 per 100 pounds in drums at production points. Not much change, possibly a slight decline, is anticipated in the average price for gum rosin in 1966-67.

Whereas U.S. gum naval stores prices reported by the U.S.D.A. Naval Stores Market News Service represent actual sales transactions, published wood naval stores prices represent the nominal offering prices or price ranges of a few of the leading manufacturers. Domestic prices reported on September 23, 1966, by Market News for gum rosin and by the "New York Journal of Commerce" for steam distilled and tall oil rosin are as follows:

Grade	*Type of rosin*		
	Gum	S. D. Wood	Tall Oil
	Dollars per cwt. in drums (f.o.b. cars, production points)		
WW	10.55–11.00	12.00	9.80
WG	9.95–10.25	11.50	9.30
N	9.35	10.20	--
M-K	----	10.00	--

Export prices have drifted lower owing mainly to the influence of tall oil rosin from various sources and Chinese gum rosin. The months immediately ahead promise intensification rather than slackening of competitive pricing. Prices for N grade gum rosin as of mid-September, c.i.f. London/Liverpool were as follows:

Country	*Dollars per cwt. in drums*
U.S.—Sales from current production	10.44
U.S.—Sales from price support stocks	8.59–9.19
Portugal	8.78
Greece	9.16
France	11.58
China	8.34

The price of gum and SD wood turpentine in mid-September 1966 was about the same as a year ago. Crude sulfate turpentine prices were up, notwithstanding the apparent increase in stocks. Considering the trend in domestic output, turpentine prices are expected to remain firm well into the 1967-68 crop year.

Rosin exports climb as European output falls

Exports of U.S. rosin are likely to increase by nearly 20 percent in the 1966 crop year. Export expansion of nearly 70 percent in tall oil rosin and about 55 percent in gum rosin should more than offset a 10 percent reduction in SD rosin exports.

Higher exports reflect more competitive pricing of gum and tall oil rosins, and gradually increasing utilization overseas. In 1966, production overseas is estimated to have increased in China, and in the sulfate naval stores countries, Sweden and Finland. Elsewhere, output, subjected to labor shortages and price wars, has declined by an average of 7 percent or 43 thousand drums (table 29).

Turpentine, in tight supply in the U.S., should continue virtually unavailable for export in 1966 and 1967.

Exports of all types of U.S. rosin and turpentine were valued at $26 million in 1965, and $29 million in each of the two preceding years. In 1966, the valuation is expected to exceed $30 million. The long term trend in world naval stores trade has been downward and toward self-sufficiency. About 28 percent of U.S. rosin disappearance, and 6 percent of turpentine marketed is exported. In 1966, domestic rosin is expected to account for more than 40 percent of the world's foreign trade. Nearly one-third of increased U.S. rosin marketings will be exported.

Some 60 percent of U.S. rosin exports are normally directed to Western Europe. In 1965, about 88 percent of U.S. exports went to seven countries: West Germany (22 percent), Japan (19 percent), U.K. (17 percent), Netherlands and Canada (10 percent each), and Italy and Australia (5 percent each).

U.S. turpentine export markets, until 1965, were also mainly in Western Europe. Only 42 percent of the sharply reduced exports of 1965, however, went to that destination. Principal recipients of U.S. turpentine in 1965 were Canada, France, West Germany, Netherlands, and Japan.

Before World War II, most of the world looked to the U.S. for its naval stores supplies. In 1965, 36 percent of the rosin in foreign trade, and 11 percent of the turpentine, originated in the U.S. (table 30).

Portugal was responsible for 21 percent of world trade in rosin, Mainland China about 14 percent, Mexico 9 percent (principally to Latin America), Greece 7 percent, and Spain 4 percent. Increasingly prominent as a source for exports in recent years have been the U.S., China, and the principal sulfate naval stores countries of Europe (Sweden and Finland). Exports from Mexico, Spain, and France have declined.

About 21 percent of world turpentine exports originated in the U.S.S.R. in 1965. Portugal supplied 16 percent, China 13 percent, Sweden 11 percent, Finland 9 percent, and Mexico 8 percent. U.S. exports have declined sharply since 1963 because of increasing domestic utilization in the U.S., and turpentine from Communist sources has moved into this supply vacuum.

Rosin consumption rising slowly

Domestic utilization of rosin is expected to increase about three percent in 1966. *Gum* rosin consumption is estimated to rise about 10 percent, reflecting increased consumption in upgraded rosin products, particularly for export. Domestic disappearance of *tall oil* rosin should increase about 4 percent while utilization of *SD* wood rosin probably will change little from 1965.

Principal domestic outlets for rosin currently are in paper size (estimated at about 40 percent of the total domestic market), rubber (20 percent), adhesives (13 percent), and printing inks and protective coatings (about 6 percent each). Paper size, printing inks, adhesives, and chewing gum (because of chicle shortage) are growth markets. Utilization in rubber is expected to rise slightly in 1966 but level off in subsequent years. Consumption in protective coatings continues a gradual decline.

Rosin utilization abroad has been increasing gradually, about 3 to 4 percent annually, from the low reached in 1962.

Turpentine utilization down from 1964-65 levels but continues high

Domestic consumption of turpentine in 1965 totaled 663 thousand barrels, down 2 percent from 1964. A further decline (reflecting lower retail sales) is likely in 1966. However, the 1966 level is expected to far exceed the average domestic disappearance for the past 10 years.

Expanded industrial utilization limits the volume of turpentine available for retail distribution and for export. Of the turpentine consumed in 1965, about 127 thousand barrels (19 percent) went into retail channels, while the remaining 536 thousand barrels were consumed industrially.

The downward trend in retail distribution of turpentine reflects increased requirements for turpentine for chemical purposes, competition from low cost petroleum solvents, and increased usage of water miscible paints.

Industrial utilization of turpentine is based mainly on applications for alpha and beta pinene. Principal alpha pinene markets are synthetic pine oil, insecticides, and poly alpha pinene resins. The demand for synthetic pine oil increases with the decline in production of natural pine oil, a processed derivative of the steam distilled segment of the naval stores industry. The insecticide market is firm. Although insecticide requirements in the U.S. have declined with the smaller cotton crop, an offsetting increase has occurred in overseas demand. Utilization in poly alpha pinene resins is growing steadily.

The principal outlet for beta pinene, and one that has been expanding rapidly, is in poly beta pinene resins for pressure-sensitive tapes. A smaller but also growing market is in perfume chemicals.

Scarcity of and price pressure on turpentine during the past few years stems mainly from demand for the beta pinene fraction, which is found only in gum and sulfate wood turpentine. If all turpentine output were fractionated, the resulting pinene production would be about three times that of beta pinene. During the past year, utilization of whole turpentine or mixtures of alpha and beta pinenes (as well as the conversion of alpha to beta pinene) in lieu of beta pinene has tended to relieve the pressure on turpentine prices.

Longterm upward trend in U.S. rosin stocks is reversed

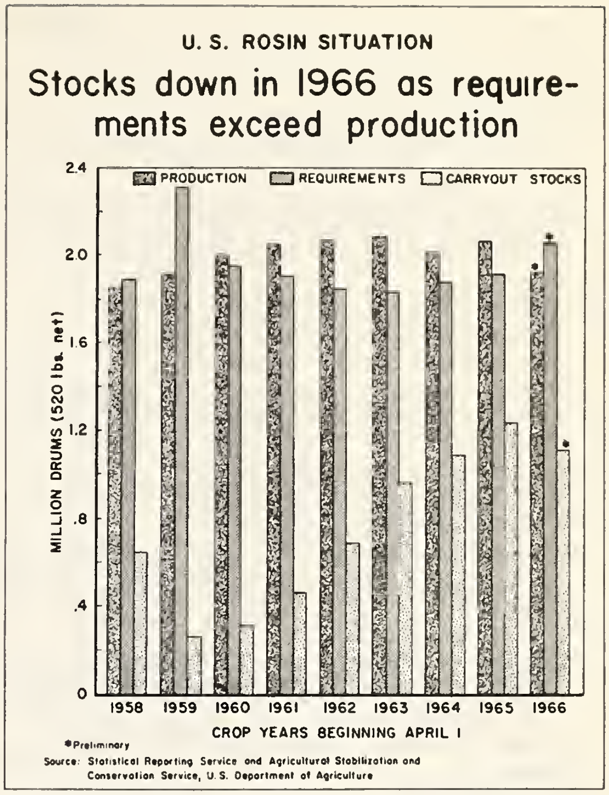
U.S. rosin stocks on March 31, 1967, are expected to be down about 10 percent or 130 thousand drums from the previous carryout. This reverses a 6-year upward trend in stocks (fig. 31). All types of rosin are expected to share in this trend, but the decline is likely to be most marked in SD and tall oil rosins (table 28). Moreover, during the 1966 crop year price support rosin inventories are likely to decline for the first time since 1961. This downward trend in stocks is expected to accelerate in 1967. Movement of price support stocks is likely to exceed 100 thousand drums in 1966 and 200 thousand in 1967.

These stock decreases stem mainly from reduced output, particularly in the U.S., gradually rising domestic consumption, and competitive pricing of tall oil and gum rosins in the export market.

Stocks of sulfate turpentine increase

The increase expected in U.S. turpentine stocks next March 31 is virtually confined to sulfate turpentine. However, these stocks are closely held, apparently in anticipation of increased demand for turpentine fractions, and are virtually unobtainable in the market. Export orders for this type of turpentine are not being filled and even domestic consumers report difficulty in obtaining supplies.

Stocks of gum and steam distilled wood turpentine continue at extremely low levels.



Source: Statistical Reporting Service and Agricultural Stabilization and Conservation Service, U. S. Department of Agriculture

FIGURE 31

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APPENDIX

TABLE 1.—*Measures of economic growth, population, and prices, 1950–66*

Year and quarter	Gross national product		Disposable personal income		Expenditures for new construction		Business expenditures for new plant and equipment	Number of housing starts	Population	Index of industrial production			Wholesale price index	Consumer price index[1]
	1958 dollars	Current dollars	1958 dollars	Current dollars	1957-59 dollars	Current dollars				Total	Furniture and fixtures	Containers	All commodities	All items
	Billions	*Billions*	*Billions*	*Billions*	*Millions*	*Millions*	*Billion dollars*	*Thousand units*	*Millions*	*1957–59 = 100*	*1957–59 = 100*	*1957–59 = 100*	*1957–59 = 100*	*1957–59 = 100*
1950	355.3	284.8	249.6	206.9	43,576	33,575	20.6	--------	152.3	74.9	79.1	78.5	86.8	83.8
1951	383.4	328.4	255.7	226.6	42,596	35,435	25.6	--------	154.9	81.3	74.7	80.6	96.7	90.5
1952	395.1	345.5	263.3	238.3	42,882	36,828	26.5	--------	157.6	84.3	76.8	77.0	94.0	92.5
1953	412.8	364.6	275.4	252.6	44,747	39,136	28.3	--------	160.2	91.3	80.3	84.3	92.7	93.2
1954	407.0	364.8	278.3	257.4	47,164	41,380	26.8	--------	163.0	85.8	83.7	83.8	92.9	93.6
1955	438.0	398.0	296.7	275.3	51,717	46,519	28.7	--------	165.9	96.6	95.1	93.7	93.2	93.3
1956	446.1	419.2	309.3	293.2	50,034	47,601	35.1	--------	168.9	99.9	98.2	97.3	96.2	94.7
1957	452.5	441.1	315.8	308.5	49,878	49,139	37.0	--------	172.0	100.7	96.5	96.8	99.0	98.0
1958	447.3	447.3	318.8	318.8	50,270	50,153	30.5	--------	174.9	93.7	92.7	97.7	100.4	100.7
1959	475.9	483.6	333.0	337.3	54,222	55,305	32.5	1,554	177.8	105.6	110.8	105.5	100.6	101.5
1960	487.8	503.8	340.2	350.0	52,171	53,941	35.7	1,296	180.7	108.7	115.5	105.4	100.7	103.1
1961	497.3	520.1	350.7	364.4	53,087	55,447	34.4	1,365	183.8	109.8	115.3	111.3	100.3	104.2
1962	529.8	560.3	367.6	385.3	55,948	59,667	37.3	1,492	186.7	118.3	126.7	117.1	100.6	105.4
1963	551.0	590.5	381.3	404.6	57,681	62,968	39.2	1,641	189.4	124.3	133.1	120.2	100.3	106.7
1964	580.0	631.7	406.5	436.6	59,153	66,221	44.9	1,591	192.1	132.3	143.4	127.9	100.5	108.1
1965 [2]	614.4	681.2	430.8	469.1	62,140	71,930	52.0	1,543	194.6	143.3	157.4	136.6	102.5	109.9
1966: [2,3]														
First quarter	640.5	721.2	448.4	495.1	66,646	78,658	58.0	1,570	196.2	151.8	167.0	144.3	105.1	111.5
Second quarter	643.5	732.3	447.8	499.9	63,726	76,389	60.1	1,395	196.7	155.1	171.4	145.1	105.6	112.7

[1] Index for city wage earners and clerical workers.

[2] Preliminary estimates.

[3] Except for population and the wholesale and consumer price indexes, data shown by quarters are seasonally adjusted annual rates. Expenditures for new construction, number of housing starts, the indexes of industrial production, wholesale prices, and consumer prices are 3-month averages. Population figures are for the month ending each quarter.

Source: Gross national product, disposable personal income, and expenditures for new plant and equipment, 1950–54, Office of the President, *Economic Report of the President* January 1966 (*18*), 1955–66, Council of Economic Advisers, *Economic Indicators*, September 1966 (*7*).

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TABLE 2.—*Production, net imports, and apparent consumption of timber products, by major product, 1950–66*

[Million cubic feet, roundwood equivalent]

Year	Domestic log production	Apparent domestic consumption	Industrial roundwood [1]													Fuelwood [2]	Log exports
			Total			Saw logs			Veneer logs			Pulpwood			Other products [3]		
			Domestic production	Net imports	Apparent consumption [4]	Domestic production	Net imports [5]	Apparent consumption [4]	Domestic production	Net imports [6]	Apparent consumption [4]	Domestic production	Net imports [7]	Apparent consumption [4] [8]	Apparent consumption	Apparent consumption	
1950	10,795	12,230	8,520	1,355	9,960	5,905	455	6,360	345	10	355	1,500	890	2,475	770	2,270	5
1951	10,965	12,055	8,725	1,190	9,825	5,780	235	6,020	390	10	400	1,825	945	2,675	730	2,230	10
1952	10,770	11,835	8,750	1,145	9,825	5,820	275	6,095	420	10	430	1,810	860	2,600	700	2,010	10
1953	10,710	11,935	8,770	1,225	10,015	5,710	330	6,040	475	25	500	1,910	870	2,800	675	1,920	20
1954	10,600	11,845	8,745	1,195	10,010	5,650	365	6,015	480	40	520	1,960	790	2,820	655	1,835	20
1955	10,945	12,250	9,175	1,290	10,505	5,785	430	6,215	575	60	635	2,185	800	3,025	630	1,745	25
1956	11,280	12,515	9,595	1,375	10,860	5,920	420	6,335	590	65	655	2,480	890	3,265	605	1,655	30
1957	10,185	11,325	8,600	1,195	9,760	5,100	335	5,435	560	70	630	2,360	790	3,115	580	1,565	20
1958	9,975	11,245	8,470	1,240	9,765	5,160	415	5,575	615	80	695	2,135	745	2,935	560	1,480	25
1959	10,750	12,205	9,330	1,425	10,815	5,745	515	6,260	720	115	835	2,330	795	3,185	535	1,390	30
1960	10,200	11,410	8,860	1,300	10,110	5,080	480	5,560	705	90	800	2,565	730	3,240	510	1,300	40
1961	9,940	11,285	8,650	1,365	10,070	4,945	545	5,485	765	100	860	2,450	720	3,235	490	1,215	75
1962	10,175	11,665	8,970	1,555	10,540	5,120	645	5,765	800	130	930	2,585	780	3,380	465	1,125	80
1963	10,580	12,065	9,320	1,595	10,955	5,355	695	6,050	870	150	1,020	2,635	750	3,425	460	1,110	150
1964 [9]	11,185	12,620	9,925	1,610	11,530	5,640	665	6,305	955	175	1,130	2,870	770	3,635	460	1,090	170
1965 [9]	11,390	12,930	10,130	1,685	11,855	5,730	670	6,405	1,030	190	1,220	2,910	825	3,770	460	1,075	185
1966 [9]	11,695	13,355	10,435	1,865	12,300	5,765	700	6,465	1,090	225	1,315	3,120	940	4,060	460	1,055	205

[1] Includes all products, except fuelwood, commonly cut from round sections of trees.

[2] Includes small quantities of imported fuelwood.

[3] Includes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and a miscellaneous assortment of similar items.

[4] Columns may not add to totals because of rounding.

[5] Net imports of lumber converted to cubic feet roundwood. Small quantities of imported saw logs (roundwood form) are included in domestic production.

[6] Net imports of veneer logs represent the equivalent net imports of veneer and plywood converted to board feet log scale, and then to cubic feet roundwood. The small volume of veneer logs imported (roundwood form) is included in domestic production.

[7] Includes net pulpwood imports and the pulpwood equivalent of the net wood pulp and paper and paperboard imports.

[8] Includes changes in stocks.

[9] Preliminary estimates.

Source: Based on data published by the U.S. Departments of Commerce and Agriculture. Data for 1900–49 in *The Demand and Price Situation for Forest Products, 1964*, table 2.

TABLE 3.—*Average stumpage prices for sawtimber sold from National Forests, by selected species, 1950–66*

[Dollars per thousand board feet]

Year and quarter	Douglas-fir [1]		Southern pine [2]		Ponderosa pine [3]		Western hemlock [4]		Oak, white and red [5]		Maple [5]	
	Current dollars	1957–59 dollars [6]	Current dollars	1957–59 dollars [6]	Current dollars	1957–59 dollars [6]	Current dollars	1957–59 dollars [6]	Current dollars	1957–59 dollars [6]	Current dollars	1957–59 dollars [6]
1950	15.40	18.90	25.70	30.80	18.30	21.00	--------	--------	--------	--------	--------	--------
1951	25.40	26.30	34.60	35.80	33.50	34.70	--------	--------	--------	--------	--------	--------
1952	25.80	27.40	38.50	41.00	27.40	29.10	--------	--------	--------	--------	--------	--------
1953	20.20	21.80	34.20	35.90	25.90	27.90	--------	--------	--------	--------	--------	--------
1954	16.20	17.40	29.70	32.00	27.20	29.30	--------	--------	--------	--------	--------	--------
1955	28.90	31.00	32.00	34.30	26.10	28.00	--------	--------	--------	--------	--------	--------
1955	37.70	39.20	37.40	38.90	27.20	28.30	--------	--------	--------	--------	--------	--------
1957	26.20	25.50	31.50	31.80	24.20	24.40	--------	--------	--------	--------	--------	--------
1958	21.80	21.70	31.10	31.00	19.10	19.00	5.30	5.30	15.30	16.20	--------	--------
1959	36.80	36.50	35.20	35.00	20.50	20.50	11.10	11.00	21.40	21.30	31.90	31.70
1950	32.00	31.80	34.50	34.30	19.10	19.00	10.50	10.40	23.40	23.20	35.00	34.80
1961	27.50	27.50	25.80	25.70	12.10	12.10	9.70	9.70	15.70	15.70	26.80	26.70
1962	24.80	24.70	26.00	25.80	15.10	15.00	8.90	8.80	17.00	16.90	27.40	27.20
1963	27.90	27.80	25.10	25.00	15.80	15.80	10.40	10.40	15.70	15.70	35.30	35.20
1954	38.10	37.90	27.80	27.70	19.00	18.90	13.30	13.20	18.00	17.90	30.50	30.40
1965:	42.50	41.60	31.70	30.90	19.80	19.30	19.10	18.50	21.30	20.80	31.90	31.10
First quarter	42.80	42.30	29.30	29.00	24.50	24.30	21.30	21.00	21.80	21.50	33.80	33.40
Second quarter	42.40	41.50	31.40	30.70	19.40	19.00	17.90	17.50	23.70	23.20	31.50	30.80
Third quarter	38.40	37.30	29.80	29.00	12.50	12.10	18.50	18.00	15.40	15.00	33.80	32.80
Fourth quarter	45.20	43.50	35.20	34.00	24.10	23.30	21.40	20.70	19.40	18.70	28.00	27.00
1956:												
First quarter	49.30	46.90	35.00	33.30	18.70	17.80	26.40	25.10	25.10	23.90	37.40	35.50
Second quarter	52.20	49.40	39.80	37.70	19.40	18.40	21.20	20.10	25.90	24.50	44.90	42.50

[1] 1950–55, average prices of National Forest and Bureau of Land Management timber sales in western Washington and western Oregon; 1957–66, average prices of National Forest timber sales in western Washington and western Oregon.

[2] Average prices of National Forest timber sales in the South.

[3] Average prices of National Forest timber sales in California.

[4] Average prices of National Forest timber sales in western Washington and western Oregon.

[5] Average prices of National Forest timber sales in the East.

[6] Derived by dividing the price in current dollars by the Wholesale Price Index (1957–59=100) of all commodities.

NOTE: All U.S. Forest Service National Forest prices in this table are the bid prices for timber sold on a Scribner Decimal C log rule basis, including Knutsen-Vandenberg Act deposits for stand improvement but excluding cooperative deposits and slash-disposal payments.

Source: U.S. Department of Agriculture, Forest Service (*30*). Data for 1910–49 in *The Demand and Price Situation for Forest Products, 1964*, table 5.

TABLE 4.—*Volume and value of sawtimber stumpage sold from National Forests, by selected species and region, 1965* [1]

Species and region [2]	Volume [3]	Value [4]	Average price per M bd. ft.
	Thousand board feet	*Dollars*	*Dollars*
Douglas-fir (West side):			
California	657,398	11,543,814	17.56
Pacific Northwest	1,918,579	81,682,942	42.57
Total	2,575,977	93,226,756	36.19
Douglas-fir (East side):			
Northern Rocky Mtn.	835,470	8,071,443	9.16
Rocky Mountain	7,520	14,407	1.92
Southwest	52,455	163,824	3.12
Intermountain	103,746	274,717	2.65
Pacific Northwest	314,346	3,219,899	10.24
Total	813,537	6,744,290	8.29
Ponderosa pine:			
Northern Rocky Mtn.	111,348	1,561,857	14.03
Rocky Mountain	89,835	451,102	5.02
Southwest	500,294	2,616,947	5.23
Intermountain	202,274	1,226,561	6.06
California	658,807	13,012,349	19.75
Pacific Northwest	776,602	14,248,296	18.35
Total	2,339,160	33,117,112	14.16
Sugar and western white pine:			
Northern Rocky Mtn.	217,312	2,665,229	12.26
Intermountain	580	1,740	3.00
California	203,392	4,732,812	23.27
Pacific Northwest	65,250	1,237,165	18.96
Total	486,534	8,636,946	17.75
Lodgepole pine:			
Northern Rocky Mtn.	162,749	506,175	3.11
Rocky Mountain	87,952	288,487	3.28
Intermountain	65,758	108,547	1.65
California	4,456	8,246	1.85
Pacific Northwest	40,571	342,368	8.44
Total	361,486	1,253,823	3.47
Western hemlock:			
Northern Rocky Mtn.	42,602	300,832	7.06
Pacific Northwest	718,479	13,705,663	19.08
Alaska	142,381	264,919	1.86
Total	903,462	14,271,414	15.80
Cedar:			
Northern Rocky Mtn.	66,516	673,612	10.13
California	68,811	262,562	3.82
Pacific Northwest	99,165	1,580,713	15.94
Total	234,492	2,516,887	10.73
Larch:			
Northern Rocky Mtn.	289,247	2,962,935	12.88
Pacific Northwest	58,424	522,281	8.94
Total	297,671	3,485,216	11.71
Redwood:			
California	19,134	606,511	31.70
Spruce:			
Northern Rocky Mtn.	128,438	810,985	6.31
Rocky Mountain	107,278	819,200	2.98
Southwest	24,108	85,408	3.54
Intermountain	41,798	115,929	2.77
Pacific Northwest	25,191	423,004	16.79
Alaska	118,378	635,204	5.37
Total	445,191	2,389,725	5.37
True fir:			
Northern Rocky Mtn.	218,542	1,111,780	5.21
Rocky Mountain	12,369	18,146	1.47
Southwest	40,353	54,948	1.86
Intermountain	28,027	40,821	1.46
California	642,686	2,301,816	3.58
Pacific Northwest [5]	395,239	4,788,664	12.12
Lake and Central	958	2,562	2.68
Total	1,333,124	8,318,732	6.24
Southern pine:			
Northeast	9,208	170,108	18.47
South	426,096	13,520,741	31.73
Lake and Central	7,863	118,212	15.38
Total	442,667	13,804,061	31.18
Red and eastern white pine:			
Northeast	2,463	42,424	17.23
South	9,167	244,476	26.67
Lake and Central	12,928	213,712	16.53
Total	24,558	500,612	20.38
Jack pine:			
Lake and Central	1,079	10,468	9.70
Eastern hemlock:			
Northeast	5,495	72,399	13.18
South	2,946	87,270	12.65
Total	8,441	109,669	12.99
White oak:			
Northeast	5,455	89,422	16.39
South	5,448	132,984	24.41
Lake and Central	4,773	79,269	16.61
Total	15,676	301,675	19.24
Red oak:			
Northeast	14,697	409,362	27.85
South	12,886	481,868	37.39
Lake and Central	83,974	452,306	13.31
Total	61,557	1,348,581	21.83
Yellow birch:			
Northeast	6,254	370,739	59.28
Lake and Central	1,799	175,354	97.48
Total	8,053	546,093	67.81

[1] Excludes pulpwood and miscellaneous products; also excludes timber sold by land exchanges and for land utilization project lands.

[2] Administrative regions of the Forest Service.

[3] Scribner Decimal C log rule except in Northeast Region where International 1/4 inch log rule is used.

[4] Includes bid price plus KV payments.

[5] Includes 71,222 thousand board feet of noble fir at $20.91 per M.

NOTE: The stumpage prices shown in this table do not necessarily indicate values for any specific tract of public or private timber. Prices received for individual tracts may vary widely because of differences in timber quality, degree of competition, timber accessibility, variations in special costs, methods of allocating overhead costs by species, or other factors.

Source: U.S. Department of Agriculture, Forest Service (*30*).

TABLE 4.—Continued

Species and region[2]	Volume[3]	Value[4]	Average price per M bd. ft.
	Thousand board feet	*Dollars*	*Dollars*
Maple:			
Northeast	14,848	498,716	28.11
Lake and Central	6,627	186,267	33.59
Total	21,475	684,983	31.90
Sugar Maple:			
Northeast	1,805	57,003	31.58
Aspen:			
Rocky Mountain	6,184	12,305	1.99
Southwest	788	2,239	2.84
Intermountain	4,694	16,032	3.42
Pacific Northwest	1,139	8,712	7.65
Lake and Central	7,015	16,462	2.35
Total	19,820	55,750	2.81
Yellow-poplar basswood and cumber:			
Northeast	7,852	234,876	29.91
South	6,991	310,439	44.41
Lake and Central	1,580	60,462	38.26
Total	16,423	605,777	36.89
Softwoods not specified by species:			
Northern Rocky Mtn.	3,337	2,582	.77
Rocky Mountain	1,032	2,581	2.50
Southwest	4,458	12,563	2.82
Pacific Northwest	5,421	29,175	5.38
Northeast	5,182	59,000	11.39
South	2,448	52,363	21.39
Lake and Central	838	9,260	11.05
Other regions	1,000	2,119	2.12
Total	23,716	169,643	7.15
Hardwoods not specified by species:			
California	4,141	4,170	1.01
Pacific Northwest	5,728	25,219	4.40
Northeast	41,282	1,555,403	37.68
South	86,599	1,762,476	20.35
Lake and Central	37,169	555,498	14.95
Other regions	46	33	.72
Total	174,965	3,902,799	22.31
All species and regions	10,630,003	196,659,476	18.50

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[1] Excludes pulpwood and miscellaneous products; also excludes timber sold by land exchanges and for land utilization project lands.

[2] Administrative regions of the Forest Service.

[3] Scribner Decimal C log rule except in Northeast Region where International ¼ inch log rule is used.

[4] Includes bid price plus KV payments.

[5] Includes 71,222 thousand board feet of noble fir at $20.91 per M.

NOTE: The stumpage prices shown in this table do not necessarily indicate values for any specific tract of public or private timber. Prices received for individual tracts may vary widely because of differences in timber quality, degree of competition, timber accessibility, variations in special costs, methods of allocating overhead costs by species, or other factors.

Source: U.S. Department of Agriculture, Forest Service (*30*).

TABLE 5.—*Saw log prices for selected species sold in Illinois, 1953–66*

[Dollars per thousand board feet, f.o.b. mill]

Year	White oak Zone 2[1]	Black walnut Zone 2[1]	Yellow-poplar Zone 1[2]
1953:			
May	25– 50	25– 75	25– 50
Oct.–Dec.	28– 75	28–100	30– 55
1954:			
Aug.–Sept.	25– 50	------------	30– 50
1955:			
Jan.–Feb.	35– 55	65– 75	30– 45
July–Aug.	30– 50	40–100	30– 50
1956:			
Jan.–Feb.	30– 75	40–150	30– 50
July–Aug.	35–100	50–100	18– 50
1957:			
Jan.–Feb.	30–100	50–100	45– 50
1958:			
Jan.–Feb.	25– 60	------------	45– 50
July–Aug.	35– 50	50– 75	35– 50
1959:			
Jan.–Feb.	25– 45	------------	45– 50
July–Aug.	30– 60	60–100	35– 50
1960:			
Nov.–Feb. 1961	40– 50	70–125	40– 60
1961:			
May–Aug.	50– 80	60–200	35– 55
Nov.–Feb. 1962	35– 50	70–125	40– 60
1962:			
May–Aug.	35– 50	85–100	40– 60
Nov.–Feb. 1963	35– 50	100–200	40– 60
1963:			
May–Aug.	40– 50	75–150	35– 60
Nov.–Feb. 1964	40– 60	100–150	40– 60
1964:			
May–Aug.	40– 60	75–150	50– 60
Nov.–Feb. 1965	45– 50	100–150	40– 50
1965:			
May–Aug.	35– 50	115–150	50– 60
Nov.–Feb. 1966	40– 55	120–150	50– 60

[1] Roughly consisting of the 26 counties located in the lower central portion of the State.

[2] Roughly consisting of the 16 counties located in the extreme southern portion of the State.

Source: Illinois Cooperative Crop Reporting Service (*12*).

TABLE 6.—*Saw log prices for selected species sold in Louisiana, 1956–66*

[Dollars per thousand board feet, f.o.b. mill]

Year	Pine	Red oak	Gums	
			Sweetgum	Tupelo
1956:				
Jan.–Mar.	54.55	85.80	35.00	
Apr.–June	54.55	35.95	33.90	
July–Sept.	55.25	84.15	84.15	
Oct.–Dec.	54.25	84.05	84.15	
1957:				
Jan.–Mar.	52.55	33.35	33.15	
Apr.–June	52.20	83.95	85.55	
July–Sept.	51.40	82.95	83.80	
Oct.–Dec.	52.15	33.95	84.80	
1958:				
Jan.–Mar.	51.10	34.30	35.10	
Apr.–June	51.45	35.55	35.95	
July–Sept.	51.80	35.15	35.90	
Oct.–Dec.	53.55	35.05	35.50	
1959:				
Jan.–Mar.	51.50	35.40	87.25	
Apr.–June	52.80	35.50	87.35	
July–Sept.	53.55	37.15	36.90	39.45
Oct.–Dec.	53.75	38.50	35.80	89.00
1960:				
Jan.–Mar.	53.70	38.20	88.45	40.55
Apr.–June	52.50	36.65	36.05	41.20
July–Sept.	49.50	36.05	87.40	40.60
Oct.–Dec.	50.95	84.90	85.00	37.80
1961:				
Jan.–Mar.	50.20	34.50	35.05	40.80
Apr.–June	48.50	34.50	34.80	38.70
July–Sept.	48.25	36.45	35.35	38.90
Oct.–Dec.	48.15	37.75	38.90	39.65
1962:				
Jan.–Mar.	47.40	38.10	37.65	40.25
Apr.–June	47.55	39.10	39.70	43.25
July–Sept.	48.65	39.40	39.50	42.50
Oct.–Dec.	47.50	39.05	39.50	41.40
1963:				
Jan.–Mar.	47.75	37.10	38.50	40.10
Apr.–June	47.20	38.70	39.00	41.90
July–Sept.	47.40	39.45	39.85	41.70
Oct.–Dec.	48.00	39.55	88.95	41.50
1954:				
Jan.–Mar.	48.55	39.20	39.10	42.40
Apr.–June	48.55	40.10	41.80	43.95
July–Sept.	47.85	40.80	40.65	43.65
Oct.–Dec.	47.50	40.90	42.05	43.85
1955:				
Jan.–Mar.	48.45	42.45	42.40	45.90
Apr.–June	48.50	43.80	44.85	47.25
July–Sept.	49.75	43.70	43.55	45.20
Oct.–Dec.	51.00	45.00	45.00	48.00
1956:				
Jan.–Mar.	54.00	48.00	48.00	50.00

Source: Louisiana Department of Agriculture, in cooperation with the United States Department of Agriculture (*13*).

TABLE 7.—*Log prices for Douglas-fir sold in District 4* [1]*, Washington, 1959–66*

[Dollars per thousand board feet, f.o.b. mill]

Year	Peelers [2]		Saw logs	
	No. 1	No. 2	No. 2	No. 3
1959:				
May 1	98.50	88.00	45.50	41.50
Aug. 1	98.00	86.50	48.00	42.50
Nov. 1	101.50	90.00	46.00	40.00
1960:				
May 15	98.50	88.00	44.50	41.50
Sept. 1	92.50	81.00	43.50	35.50
Nov. 15	95.00	84.50	42.50	87.00
1961:				
Feb. 15	98.00	88.00	42.50	36.00
May 15	92.50	82.50	43.00	87.00
Aug. 15	101.50	91.50	45.00	88.00
Nov. 15	101.00	91.00	43.00	89.50
1962:				
Feb. 15	100.50	90.00	44.00	89.00
July 15	106.00	95.00	45.50	40.00
Sept. 15	100.00	90.00	48.50	39.00
Nov. 15	----------	----------	44.00	35.50
1953:				
Jan. 15	95.50	89.00	47.00	88.50
March 15	93.50	83.50	45.50	----------
May 15	95.50	86.50	50.00	44.00
Sept. 15	100.00	90.00	45.00	40.00
Nov. 15	104.00	94.00	49.00	89.00
Dec. 15	110.00	92.00	----------	----------
1964:				
March 15	110.00	100.00	54.00	48.00
May 15	105.00	92.50	52.50	49.00
July 15	110.00	100.00	45.00	----------
Sept. 15	119.00	109.00	45.00	44.00
Nov. 15	106.50	96.50	56.50	48.00
1965:				
Jan. 15	115.00	105.00	45.50	45.00
March 15	105.00	95.00	48.00	41.50
July 15	108.50	98.50	53.50	45.00
Sept. 15	112.50	102.50	55.00	45.50
Nov. 15	----------	----------	----------	47.50
1956:				
Jan. 15	[3] 110.00	[3] 99.00	48.00	46.00
March 15	[3] 106.00	[3] 95.00	49.50	43.00
May 15	[3] 114.00	[3] 102.50	50.50	50.00

[1] King, Kitsap, Pierce, Mason, and Thurston Counties.

[2] Veneer logs.

[3] Data are averages for western Washington.

Source: Washington Crop Reporting Service (*56*).

TABLE 8.—*Average hourly earnings* [1] *in timber-based industries and all manufacturing in the United States and selected States, 1950–65*

Year	Lumber and wood products except furniture		Logging camps and logging contractors		Sawmills and planing mills		Millwork, veneer, plywood, and prefabricated structural wood products		Paper and allied products		Furniture and fixtures		Manufacturing	
	Dollars	Index 1957-59=100	Dollars	Index 1967-59=100	Dollars	Index 1967-59=100	Dollars	Index 1957-59=100	Dollars	Index 1967-59=100	Dollars	Index 1957-59=100	Dollars	Index 1967-59=100
UNITED STATES														
1950	1.30	72.2	--	--	1.20	73.2	1.38	71.5	1.40	66.7	1.28	71.6	1.44	67.9
1951	1.41	78.3	--	--	1.30	79.3	1.49	77.2	1.61	71.9	1.39	77.7	1.66	73.6
1952	1.49	82.8	--	--	1.38	84.1	1.67	81.3	1.59	76.7	1.47	82.1	1.66	77.8
1953	1.55	86.1	--	--	1.44	87.8	1.63	84.6	1.67	79.5	1.64	86.0	1.74	82.1
1954	1.67	87.2	--	--	1.46	89.0	1.68	87.0	1.73	82.4	1.57	87.7	1.78	84.0
1955	1.62	90.0	--	--	1.50	91.5	1.74	90.2	1.81	86.2	1.62	90.5	1.86	87.7
1956	1.69	93.9	--	--	1.58	96.3	1.80	93.3	1.92	91.4	1.69	94.4	1.95	92.0
1957	1.74	96.7	--	--	1.61	98.2	1.86	96.4	2.02	96.2	1.76	97.8	2.05	96.7
1958	1.79	99.4	--	--	1.63	99.4	1.93	100.0	2.10	100.0	1.78	99.4	2.11	99.5
1959	1.87	103.9	--	--	1.69	103.0	2.01	104.1	2.18	103.8	1.83	102.2	2.19	103.3
1960	1.89	105.0	--	--	1.71	104.3	2.05	106.2	2.26	107.6	1.88	105.0	2.26	106.6
1961	1.95	108.3	--	--	1.76	107.3	2.09	108.3	2.34	111.4	1.91	106.7	2.32	109.4
1962	1.99	110.6	--	--	1.83	111.6	2.14	110.9	2.40	114.3	1.96	108.9	2.39	112.7
1963	2.04	113.3	--	--	1.88	114.6	2.18	113.0	2.48	118.1	2.00	111.7	2.46	116.0
1964	2.11	117.2	--	--	1.98	120.7	2.26	117.1	2.66	121.9	2.06	114.5	2.63	119.3
1965	2.17	120.6	--	--	2.02	123.2	2.33	120.7	2.66	126.2	2.12	118.4	2.61	123.1
WASHINGTON														
1950	1.87	78.0	--	--	--	--	--	--	1.76	71.7	1.54	72.0	1.73	71.0
1951	2.00	83.4	--	--	--	--	--	--	1.88	77.0	1.67	78.0	1.87	76.7
1952	2.12	88.4	--	--	--	--	--	--	2.00	82.0	1.76	82.2	1.97	80.8
1953	2.16	90.1	--	--	--	--	--	--	2.06	84.4	1.76	82.2	2.04	83.7
1954	2.19	91.4	--	--	--	--	--	--	2.12	86.9	1.80	84.1	2.09	86.8
1955	2.25	93.9	2.58	93.1	2.16	94.6	2.20	94.3	2.18	89.3	1.83	85.5	2.17	89.0
1956	2.35	98.0	2.69	97.1	2.26	98.6	2.26	96.9	2.26	92.6	1.92	89.7	2.27	93.1
1957	2.32	96.8	2.68	96.8	2.24	98.1	2.23	95.6	2.37	97.1	2.04	95.3	2.34	96.0
1958	2.37	98.9	2.76	99.6	2.25	98.6	2.30	98.6	2.41	98.8	2.16	100.6	2.43	99.7
1959	2.50	104.3	2.87	103.6	2.36	103.4	2.47	105.9	2.64	104.1	2.23	104.2	2.54	104.2
1960	2.54	106.0	2.96	106.9	2.40	105.1	2.46	105.4	2.64	108.2	2.34	109.3	2.63	107.9
1961	2.57	107.2	2.96	106.9	2.45	107.3	2.47	106.9	2.72	111.5	2.42	113.1	2.72	111.6
1962	2.61	108.9	2.98	107.6	2.49	109.1	2.53	108.4	2.82	116.6	2.50	116.8	2.81	116.3
1963	2.71	113.1	3.09	111.6	2.57	112.6	2.65	113.6	2.94	120.6	2.53	118.2	2.87	117.8
1964	2.88	120.2	3.25	117.3	2.72	119.1	2.81	120.4	2.99	122.5	2.56	119.2	2.98	122.3
1965	2.95	123.1	3.34	120.6	2.78	121.9	2.86	122.7	3.16	129.1	2.66	123.8	3.09	126.6
NEW YORK														
1950	1.18	67.4	--	--	--	--	--	--	1.34	66.8	1.43	69.8	1.62	70.5
1951	1.30	74.3	--	--	--	--	--	--	1.46	72.7	1.55	76.6	1.63	75.6
1952	1.36	77.1	--	--	--	--	--	--	1.52	76.7	1.66	81.0	1.70	78.8
1953	1.40	80.0	--	--	--	--	--	--	1.61	80.2	1.74	84.9	1.79	83.0
1954	1.42	81.1	--	--	--	--	--	--	1.68	83.7	1.76	86.9	1.84	86.3

1955	1.45	82.9	--	--	--	--	--	--	1.76	87.7	1.79	87.8	1.90	88.1
1956	1.54	88.0	--	--	--	--	--	--	1.83	91.2	1.90	92.7	1.99	92.2
1957	1.67	95.4	--	--	--	--	--	--	1.94	96.7	1.98	96.6	2.08	96.4
1958	1.77	101.1	--	--	--	--	--	--	2.00	99.6	2.07	101.0	2.16	100.1
1959	1.81	103.4	--	--	--	--	--	--	2.08	103.6	2.10	102.4	2.23	103.4
1960	1.84	105.1	--	--	--	--	--	--	2.16	107.6	2.17	105.9	2.31	107.1
1961	1.89	108.0	--	--	--	--	--	--	2.25	112.1	2.21	107.8	2.38	110.3
1962	1.92	109.7	--	--	--	--	--	--	2.31	115.1	2.25	109.8	2.44	113.1
1963	1.99	113.7	--	--	--	--	--	--	2.39	119.1	2.31	112.7	2.52	116.8
1964	2.08	118.9	--	--	--	--	--	--	2.48	123.6	2.37	115.6	2.60	120.5
1965	2.10	120.0	--	--	--	--	--	--	2.55	127.1	2.41	117.6	2.68	124.2

ARKANSAS

1950	--	--	--	--	--	--	--	--	1.38	62.8	0.96	72.3	1.02	68.5
1951	.98	79.0	--	--	--	--	--	--	1.47	66.9	1.00	75.4	1.09	73.2
1952	1.01	81.5	--	--	--	--	--	--	1.60	72.8	1.05	79.1	1.14	76.5
1953	1.05	84.7	--	--	--	--	--	--	1.70	77.4	1.08	81.4	1.21	81.2
1954	1.06	85.5	--	--	--	--	--	--	1.76	80.1	1.11	83.6	1.25	83.9
1955	1.07	86.3	--	--	--	--	--	--	1.82	82.8	1.11	83.6	1.29	86.6
1956	1.18	95.2	--	--	--	--	--	--	1.96	89.2	1.22	91.9	1.39	93.3
1957	1.22	98.4	--	--	--	--	--	--	2.09	95.1	1.28	96.5	1.46	98.0
1958	1.23	99.2	--	--	--	--	--	--	2.21	100.6	1.33	100.2	1.49	100.0
1959	1.27	102.4	--	--	--	--	--	--	2.29	104.2	1.37	103.2	1.52	102.0
1960	1.30	104.8	--	--	--	--	--	--	2.38	108.3	1.40	105.5	1.56	104.7
1961	1.35	108.9	--	--	--	--	--	--	2.46	112.0	1.43	107.8	1.61	108.1
1962	1.41	113.7	--	--	--	--	--	--	2.56	116.5	1.50	113.0	1.66	111.4
1963	1.46	117.7	--	--	--	--	--	--	2.62	119.3	1.54	116.0	1.72	115.4
1964	1.53	123.4	--	--	--	--	--	--	2.71	123.4	1.60	120.6	1.78	119.5
1965	1.58	127.4	--	--	--	--	--	--	2.78	126.5	1.65	124.3	1.83	122.8

MINNESOTA

1950	--	--	--	--	--	--	--	--	1.44	67.5	--	--	1.44	66.1
1951	--	--	--	--	--	--	--	--	1.55	72.7	--	--	1.55	71.1
1952	--	--	--	--	--	--	--	--	1.65	77.4	--	--	1.66	76.1
1953	--	--	--	--	--	--	--	--	1.74	81.6	--	--	1.76	80.7
1954	--	--	--	--	--	--	--	--	1.80	84.4	--	--	1.82	83.5
1955	--	--	--	--	--	--	--	--	1.86	87.2	--	--	1.90	87.2
1956	--	--	--	--	--	--	--	--	1.95	91.4	--	--	1.99	91.3
1957	--	--	--	--	--	--	--	--	2.06	96.6	--	--	2.09	95.9
1958	2.06	96.7	--	--	--	--	--	--	2.13	99.9	2.14	97.5	2.19	100.5
1959	2.20	103.3	--	--	--	--	--	--	2.21	103.6	2.25	102.5	2.27	104.1
1960	2.25	105.6	--	--	--	--	--	--	2.29	107.4	2.31	105.2	2.36	108.3
1961	2.42	113.6	--	--	--	--	--	--	2.42	113.5	2.37	108.0	2.45	112.4
1962	2.45	115.0	--	--	--	--	--	--	2.49	116.7	2.47	112.5	2.52	115.6
1963	2.46	115.5	--	--	--	--	--	--	2.55	119.5	2.54	115.7	2.56	117.4
1964	2.43	114.1	--	--	--	--	--	--	2.64	123.8	2.59	118.0	2.64	121.1
1965	2.37	111.3	--	--	--	--	--	--	2.70	126.6	2.64	120.3	2.72	124.8

[1] Average hourly earnings for production or nonsupervisory workers.

Source: U.S. Department of Labor, Bureau of Labor Statistics (*51, 52*).

TABLE 9.—*United States imports and exports of logs, by softwoods and hardwoods, 1950–65* [1]

[Million board feet]

Year	Imports			Exports		
	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods
1950	268	156	112	48	29	19
1951	212	85	127	79	58	21
1952	191	114	77	64	44	19
1953	227	115	112	115	86	29
1954	221	128	93	189	106	33
1955	199	79	119	166	144	22
1956	160	40	121	188	155	38
1957	131	40	91	139	107	82
1958	95	22	74	170	127	43
1959	98	25	73	205	168	87
1960	113	32	80	266	210	56
1961	106	57	49	482	432	50
1962	100	38	62	522	453	70
1963	98	44	54	951	880	72
1964	65	9	56	1,086	1,023	64
1965	68	14	55	1,193	1,111	81

[1] Data may not add to totals because of rounding.

Source: U.S. Department of Commerce, Bureau of the Census (*44, 45*).

TABLE 10.—*Per capita consumption of timber products, by major product, 1950–66*

Year	All timber products [2]	Industrial roundwood [1]								Fuelwood	
		Total [2]	Saw logs		Pulpwood		Veneer logs		Other products		
	Cubic feet	*Cubic feet*	*Cubic feet*	*Board feet (lumber tally)*	*Cubic feet*	*Cords*	*Cubic feet*	*Board feet (local log rule)*	*Cubic feet*	*Cubic feet*	*Cords*
1950	80.3	65.4	41.8	269	16.3	0.2	2.3	13.6	5.1	14.9	0.2
1951	77.8	63.4	38.9	250	17.3	.2	2.6	15.1	4.7	14.4	.2
1952	75.1	62.3	38.7	249	16.5	.2	2.7	16.0	4.4	12.8	.2
1953	74.5	62.5	37.7	243	17.5	.2	3.1	18.4	4.2	12.0	.2
1954	72.7	61.4	86.9	237	17.3	.2	3.2	18.8	4.0	11.3	.2
1955	73.8	63.3	37.5	242	18.2	.2	3.8	22.6	3.8	10.5	.1
1956	74.1	64.3	37.5	242	19.3	.2	3.9	22.8	3.6	9.8	.1
1957	65.8	56.7	31.6	204	18.1	.2	3.7	21.6	8.4	9.1	.1
1958	64.3	55.8	31.9	206	16.8	.2	4.0	23.6	3.2	8.5	.1
1959	68.6	60.8	35.2	228	17.9	.2	4.7	27.8	8.0	7.8	.1
1960	63.1	55.9	30.8	199	17.9	.2	4.4	26.4	2.8	7.2	.1
1961	61.4	54.8	29.8	193	17.6	.2	4.7	28.1	2.7	6.6	.1
1962	62.5	56.5	30.9	200	18.1	.2	5.0	29.7	2.5	6.0	.1
1963	63.7	57.8	31.9	207	18.1	.2	5.4	32.2	2.4	5.9	.1
1964	65.7	60.0	32.8	213	18.9	.2	5.9	35.2	2.4	5.7	.1
1965 [3]	66.4	60.9	32.9	212	19.4	.2	6.3	87.5	2.4	5.5	.1
1966 [3]	67.9	62.5	32.9	211	20.6	.3	6.7	39.9	2.3	5.4	.1

[1] Includes all products, except fuelwood, commonly cut from round sections of trees.

[2] Data may not add to totals because of rounding.

[3] Preliminary estimates.

Source: Based on data published by the U.S. Departments of Commerce and Agriculture. Data for 1900–49 in *The Demand and Price Situation for Forest Products, 1964*, table 3.

TABLE 11.—*Lumber production, imports, exports, and consumption, by softwoods and hardwoods, 1950–66* [1]

Year	Domestic production			Imports			Exports			Apparent consumption			Per capita consumption		
	Total	Soft-woods	Hard-woods	Total	Soft-woods [2]	Hard-woods	Total	Soft-woods [2]	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods
	Billion board feet	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Billion board feet*	*Board feet*	*Board feet*	*Board feet*
1950	38.0	30.6	7.4	3.4	3.1	0.3	0.5	0.4	0.1	40.9	33.4	7.5	269	219	50
1951	37.2	29.5	7.7	2.5	2.3	.2	1.0	.9	.1	38.7	30.9	7.8	250	199	51
1952	37.5	30.2	7.2	2.5	2.3	.2	.7	.6	.2	39.2	81.9	7.8	249	203	46
1953	36.7	29.6	7.2	2.8	2.5	.2	.6	.5	.1	38.9	31.6	7.8	243	197	45
1954	36.4	29.3	7.1	3.1	2.9	.2	.7	.6	.1	38.7	31.5	7.1	237	194	44
1955	37.4	29.8	7.6	3.6	3.3	.3	.8	.7	.2	40.1	32.5	7.6	242	196	46
1956	38.2	30.2	8.0	3.4	3.2	.8	.8	.6	.1	40.9	32.8	8.1	242	194	48
1957	32.9	27.1	5.8	3.0	2.7	.2	.8	.6	.2	35.0	29.2	5.8	204	170	34
1958	33.4	27.4	6.0	3.4	3.2	.2	.7	.6	.2	36.1	30.0	6.1	206	171	35
1959	37.2	30.5	6.7	4.1	3.8	.3	.8	.6	.2	40.5	33.7	6.8	228	189	88
1960	32.9	26.7	6.3	3.9	3.6	.3	.9	.7	.2	36.0	29.6	6.4	199	164	35
1961	32.0	26.1	6.0	4.3	4.0	.2	.8	.6	.2	35.5	29.5	6.0	193	160	33
1962	33.2	26.8	6.4	4.9	4.6	.3	.8	.6	.1	37.3	30.8	6.5	200	165	85
1963	34.7	27.6	7.2	5.3	5.0	.3	.9	.7	.1	39.2	31.8	7.3	207	168	89
1964 [3]	36.6	29.3	7.3	5.2	4.9	.3	1.0	.8	.1	40.8	33.4	7.4	213	174	89
1965 [3]	36.9	29.2	7.7	5.2	4.9	.3	.9	.8	.1	41.2	33.3	7.9	212	171	41
1966 [3]	37.1	29.2	7.9	5.6	5.2	.4	1.1	.9	.2	41.6	33.5	8.1	211	170	41

[1] Data may not add to totals because of rounding.

[2] Includes small volumes of mixed species (not classified as softwoods or hardwoods).

[3] Preliminary estimates.

NOTE: Estimates of lumber production for 1965 and 1966 are based in part upon data published by the National Forest Products Association and related associations (*15, 22, 23, 58*).

Source: U.S. Department of Commerce, Bureau of the Census (*40*); U.S. Department of Agriculture, Forest Service. Data for selected years 1899–1949 in *The Demand and Price Situation for Forest Products, 1964*, table 7.

TABLE 12.—*Lumber production, by section and by softwoods and hardwoods, 1950–66* [1]

[Billion board feet]

Year	All sections			North			South			West total [2]
	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods	
1950	38.0	30.6	7.4	4.9	2.0	3.0	14.6	10.2	4.4	18.6
1951	37.2	29.5	7.7	5.0	1.7	3.3	13.3	8.9	4.4	18.9
1952	37.5	30.2	7.2	4.1	1.4	2.7	13.7	9.2	4.5	19.7
1953	36.7	29.6	7.2	5.0	1.5	3.5	11.8	8.1	3.7	19.9
1954	36.4	29.3	7.1	4.6	1.7	3.0	11.7	7.7	4.1	20.0
1955	37.4	29.8	7.6	4.5	1.5	3.0	12.2	7.7	4.5	20.7
1956	38.2	30.2	8.0	5.1	1.6	3.4	12.7	8.2	4.5	20.5
1957	32.9	27.1	5.8	4.1	1.8	2.2	10.3	6.7	8.5	18.6
1958	33.4	27.4	6.0	3.9	1.4	2.5	9.8	6.4	3.4	19.7
1959	37.2	30.5	6.7	4.2	1.5	2.7	11.0	7.0	8.9	22.0
1960	32.9	26.7	6.3	3.9	1.2	2.7	9.8	5.9	8.4	19.6
1961	32.0	26.1	6.0	3.7	1.2	2.5	9.1	5.8	8.4	19.2
1962	33.2	26.8	6.4	3.9	1.2	2.7	9.5	5.9	3.6	19.9
1963	34.7	27.6	7.2	4.2	1.3	2.9	10.2	6.1	4.1	20.3
1964 [3]	36.6	29.3	7.3	4.4	1.1	3.2	10.5	6.6	8.9	21.7
1965 [3]	36.9	29.2	7.7	4.5	1.1	3.4	10.8	6.7	4.1	21.6
1966 [3]	37.1	29.2	7.9	4.6	1.1	3.5	11.0	6.8	4.2	21.5

[1] Data may not add to totals because of rounding.

[2] Includes small volumes of western hardwoods—about 0.1 billion board feet in recent years.

[3] Preliminary estimates.

NOTE: Estimates for 1965 and 1966 are based in part upon data published by the National Forest Products Association and related associations (*15, 22, 23, 58*).

Source: U.S. Department of Commerce, Bureau of the Census; U.S. Department of Agriculture, Forest Service. Data for selected years 1899–1949 in *The Demand and Price Situation for Forest Products, 1964*, table 9.

TABLE 13.—*Lumber production and number of establishments, by mill size class and section, selected years 1947–63*

Year	Total		Size class in thousand board feet											
			Less than 999		1,000–4,999		5,000–9,999		10,000–24,999		25,000–49,999		50,000 plus	
	Production	Establishments[1]	Production	Establishments[1]	Production	Establishments[1]	Production	Establishments[1]	Production	Establishments[1]	Production	Establishments[1]	Production	Establishments[1]
	Million board feet	Number	Million board feet	Number	Million board feet	Number	Million board feet	Number	Million board feet	Number	Million board feet	Number	Million board feet	Number
							UNITED STATES							
1947	35,404	53,109	9,096	47,538	8,981	4,467	4,169	508	5,000	331	4,254	122	3,904	43
1952	87,452	43,613	7,754	37,215	9,898	5,136	4,362	628	6,697	451	4,632	135	4,119	48
1953	36,742	50,416	7,538	44,887	8,491	4,259	4,518	638	6,466	424	5,473	159	4,256	49
1954	36,356	45,929	7,670	41,050	7,159	3,537	4,434	636	7,485	494	4,714	142	4,894	60
1955	37,380	43,482	7,758	38,557	6,758	3,546	4,655	676	7,403	482	4,929	142	5,877	69
1956	88,199	46,400	8,736	41,705	6,553	3,343	4,950	698	7,129	450	5,075	140	5,636	64
1957	32,901	37,597	4,748	82,570	----	----	3,825	549	----	---	4,531	127	6,092	67
1958	33,385	31,545	8,272	27,065	6,698	3,235	4,040	564	7,228	545	6,091	169	6,056	67
1959	37,155	34,113	4,575	28,562	7,549	4,126	3,597	562	7,139	569	7,236	205	6,870	89
1950	32,926	33,343	4,343	29,017	6,678	3,154	3,796	532	6,219	405	6,057	169	5,833	66
1951	32,019	33,254	4,281	29,175	6,274	2,942	3,719	517	6,300	385	5,847	167	5,598	68
1962	33,178	32,915	4,254	28,835	6,178	2,916	3,922	508	6,532	403	6,153	180	6,029	74
1953	34,705	32,197	3,768	28,031	6,368	2,879	3,816	571	6,925	436	7,124	200	6,705	80
							EASTERN UNITED STATES							
1947	19,057	48,148	8,121	44,280	6,480	3,417	2,107	309	----	126	----	16	----	--
1952	17,742	39,534	7,254	35,307	6,853	3,846	1,799	259	1,656	116	170	6	----	--
1953	15,834	46,741	6,945	43,020	5,298	3,341	1,891	274	1,361	94	339	12	----	--
1954	16,375	42,705	6,727	39,527	5,224	2,722	2,158	316	1,751	129	----	10	----	2
1955	16,577	40,370	6,724	35,988	5,537	2,931	2,079	312	1,705	123	444	13	188	3
1956	17,736	43,505	8,043	40,255	5,477	2,830	1,905	286	1,654	118	408	12	233	4
1957	14,341	35,166	4,432	31,715	5,522	2,955	1,948	302	1,719	178	413	11	307	5
1958	13,683	29,294	2,930	26,105	5,306	2,536	2,307	319	2,011	215	704	15	425	4
1959	15,151	31,228	4,271	27,846	5,387	2,727	2,507	410	1,850	220	574	17	562	8
1950	13,286	31,139	3,879	28,148	5,071	2,574	1,890	283	1,528	111	652	19	266	4
1951	12,833	31,050	3,797	28,213	4,770	2,447	1,938	288	1,451	91	609	17	258	4
1962	13,298	30,702	8,804	27,845	4,810	2,459	2,023	267	1,719	108	655	19	287	4
1953	14,391	30,218	3,523	27,222	5,309	2,503	2,489	339	1,816	127	952	23	302	4

WESTERN UNITED STATES

1947	16,337	4,961	975	3,258	2,501	1,050	2,062	299	----	205	----	106	----	43
1952	19,720	4,079	500	1,908	3,045	1,290	2,563	369	5,031	335	4,462	129	4,119	48
1953	19,908	3,675	593	1,867	2,193	918	2,627	364	5,105	330	5,134	147	4,256	49
1954	19,980	3,223	943	1,533	1,935	815	2,276	320	5,664	365	----	132	----	58
1955	20,703	3,112	1,034	1,579	1,221	615	2,576	364	5,698	359	4,485	129	5,689	66
1956	20,463	2,895	693	1,450	1,186	513	3,054	412	5,465	332	4,667	128	5,398	60
1957	18,560	2,431	316	855	----	----	1,877	247	----	----	4,218	116	5,785	62
1958	19,702	2,351	342	960	1,392	599	1,733	245	5,217	330	5,387	154	5,631	63
1959	22,015	2,885	304	716	2,262	1,399	1,190	152	5,289	349	6,662	188	6,308	81
1960	19,640	2,204	464	869	1,607	580	1,906	249	4,691	294	5,405	150	5,567	62
1961	19,186	2,194	484	962	1,504	495	1,781	229	4,849	294	5,238	150	5,330	64
1962	19,880	2,214	450	990	1,368	457	1,899	241	4,913	295	5,508	161	5,742	70
1963	20,315	1,979	245	809	1,059	376	1,327	232	5,109	309	6,172	177	6,403	76

[1] Data for 1957-63 show number of establishments—data for 1947-56 number of mills. Because some establishments have more than 1 mill, the data are not exactly comparable. For example, in 1958 there were 32,339 mills compared to 31,645 establishments.

Source: U.S. Department of Commerce, Bureau of the Census (*40*).

TABLE 14.—*Wholesale price indexes for lumber, plywood, and building board, 1950–66*

[*1957–59 =100*]

Year	All lumber	Softwood lumber											
		Douglas-fir				Southern pine				Ponderosa pine			
						Dimension		Boards		Boards		Shop	Larch-Douglas-fir, dimension[1], standard and better
		All Douglas-fir lumber	Dimension, construction, 25 percent standard, green	Boards, construction, 25 percent standard, green	All southern pine lumber	No. 1	No. 2	No. 2	No. 3	No. 3	No. 4	No. 2	
1950	93.9	97.4	98.6	103.4	94.1	86.0	86.7	94.7	97.7	98.3	94.1	85.0	----
1951	101.6	106.6	108.6	113.2	100.9	91.9	94.2	101.7	106.2	114.1	106.8	99.0	----
1952	99.0	105.5	108.8	110.6	101.9	93.2	96.2	102.4	105.0	112.8	108.3	98.7	----
1953	98.1	97.1	95.8	101.4	101.0	93.9	94.8	100.3	103.0	110.0	114.0	104.6	----
1954	96.4	98.9	100.2	99.2	96.5	92.7	90.0	94.2	95.8	98.0	110.9	104.4	----
1955	102.4	108.1	110.5	109.0	100.4	96.9	95.6	100.5	102.6	107.7	107.3	107.2	----
1956	104.6	107.6	109.2	108.0	103.9	101.2	99.6	104.8	105.8	107.5	103.6	107.4	----
1957	98.5	96.8	95.9	91.8	99.9	100.1	99.3	98.9	97.0	98.3	99.3	97.9	----
1958	97.0	95.0	94.4	92.1	98.4	98.1	98.5	98.1	97.9	94.7	96.1	94.8	----
1959	104.5	108.3	109.7	116.1	101.7	101.8	102.3	103.0	105.1	107.1	104.7	107.3	110.9
1960	99.8	99.0	101.2	97.1	100.1	102.7	102.9	99.0	96.2	102.3	85.1	103.7	103.4
1961	94.7	94.9	98.2	85.7	95.8	99.7	99.7	92.7	87.5	94.9	71.3	84.8	101.3
1962	96.5	97.7	99.7	91.4	95.7	99.3	99.4	93.1	88.7	92.1	82.6	90.1	102.7
1963	98.9	101.5	101.2	96.3	95.4	99.1	98.1	92.5	90.6	92.1	84.8	95.8	106.0
1964	100.7	103.2	99.6	95.5	95.5	99.8	98.4	92.7	90.3	89.5	76.1	103.9	107.3
1965	101.9	102.4	99.7	90.3	97.2	100.9	100.4	94.8	92.3	92.1	74.3	105.0	108.5
1966:													
Jan.	104.3	102.8	100.0	91.0	101.4	103.6	104.1	99.8	97.4	86.7	75.1	102.1	107.8
Feb.	105.6	102.9	100.9	91.2	102.6	105.2	104.9	101.2	98.8	89.9	79.6	103.7	111.0
Mar.	107.4	107.3	105.9	96.5	103.6	105.7	105.7	102.2	101.7	93.1	77.1	103.9	112.1
Apr.	110.9	114.1	113.4	105.8	107.6	110.1	109.4	106.0	108.6	97.6	78.3	103.2	115.5
May	113.1	114.0	111.3	108.4	108.5	111.1	110.3	107.5	109.3	112.6	90.9	106.2	125.6
June	112.1	111.7	107.8	107.9	108.5	111.1	110.4	107.3	109.3	108.0	90.4	106.6	122.7
July	110.3	109.0	105.4	107.0	108.7	111.5	111.0	107.1	109.6	96.6	86.0	106.5	113.3
Aug.	109.9	107.6	102.2	108.5	109.4	111.8	111.4	107.8	109.8	93.9	82.8	105.0	113.1

Year	Hardwood lumber					All plywood	Softwood plywood				Hardwood plywood			Insulation board		All hardboard[2]
	All hardwood lumber	Oak, red, flooring, select	Gum No. 1 common	Poplar No. 1 common	Birch No. 1 common		All softwood plywood	Interior, panel, ¼ inch, grade A-D	Exterior, panel, ⅜ inch, grade A-C	Interior, sheathing, ⅝ inch, grade C-D	All hardwood plywood	Gum, standard panel	Birch, standard panel	All insulation board	Roof, 1 inch[1]	
1950	93.8	98.6	107.4	96.2	84.6	108.4	121.5	122.9	114.1	123.4	96.7	96.7	96.4	74.3	----	----
1951	100.8	107.7	112.3	103.3	88.3	117.2	129.3	128.7	124.0	129.9	105.8	106.6	103.9	78.3	----	----
1952	92.8	93.3	87.9	99.6	88.3	106.9	117.8	117.6	114.4	113.9	96.6	92.9	102.0	79.7	----	----
1953	94.6	94.0	105.0	102.0	90.7	111.3	118.2	117.5	112.8	120.5	103.4	100.5	107.6	83.8	----	----
1954	92.6	94.7	91.7	103.3	91.9	105.0	114.4	113.1	109.5	118.0	95.7	91.5	101.9	88.2	----	----
1955	97.9	106.1	89.0	103.3	94.4	107.4	117.7	116.4	112.2	124.6	97.9	94.1	103.5	90.3	----	----
1956	104.1	109.5	101.2	103.3	97.4	103.5	107.7	106.8	105.8	111.0	99.9	97.4	103.6	94.5	----	----
1957	98.6	98.2	93.9	101.5	99.2	98.1	97.4	97.3	98.0	97.9	99.0	98.4	99.8	97.7	----	----
1958	98.6	97.8	102.7	99.3	100.3	98.9	98.1	98.3	98.6	98.1	99.7	99.6	100.0	99.8	----	99.3
1959	102.8	104.0	103.5	99.3	100.4	103.0	104.5	104.4	103.4	104.1	101.4	102.1	100.3	102.5	101.8	100.3
1960	103.8	105.6	98.2	99.3	105.1	97.8	92.9	90.6	91.9	94.1	102.8	103.8	101.2	102.2	100.3	99.5
1961	98.5	99.1	93.4	99.3	106.5	95.7	90.3	87.6	89.3	92.0	101.4	104.4	98.9	101.0	97.5	100.0
1962	98.3	95.1	105.0	99.3	106.5	92.4	87.3	84.1	85.0	90.1	97.8	103.8	94.1	94.5	87.5	101.0
1963	101.5	101.5	110.0	102.6	106.8	93.5	89.4	87.7	88.3	90.3	97.3	104.0	93.2	92.4	85.1	101.8
1964	105.4	109.2	109.4	106.0	111.8	92.3	86.7	85.3	87.2	86.1	98.5	104.9	94.4	90.4	84.9	99.9
1965	111.3	114.8	117.8	107.2	113.6	92.3	86.8	85.1	86.6	87.0	98.2	104.9	94.1	88.4	82.3	99.8
1966:																
Jan.	120.1	128.2	131.4	111.2	115.7	93.9	89.4	92.0	90.2	85.6	98.4	104.9	94.3	88.1	82.8	99.8
Feb.	121.9	130.2	136.5	112.8	115.7	94.0	89.6	92.9	90.7	85.2	98.4	104.9	94.3	88.1	82.8	99.8
Mar.	123.7	132.4	141.5	115.2	115.7	97.7	95.9	101.6	97.4	89.2	98.4	104.9	94.3	88.1	82.8	99.7
Apr.	125.7	138.2	146.6	115.2	115.7	102.4	103.3	113.1	107.7	91.6	99.0	104.9	95.2	88.1	82.8	99.5
May	127.5	139.3	151.7	119.1	118.7	100.3	99.6	109.7	104.2	87.4	99.2	105.6	95.2	88.0	84.3	99.5
June	127.7	139.3	151.7	119.1	118.7	93.8	88.6	91.5	88.8	85.2	99.2	105.6	95.2	88.1	84.6	99.4
July	127.1	136.4	151.7	119.1	118.7	91.5	84.7	84.2	86.0	83.1	99.2	105.6	95.2	88.7	84.6	99.4
Aug.	127.5	135.8	156.7	120.7	118.7	90.0	82.2	81.4	83.8	80.4	99.2	105.6	95.2	89.0	84.6	99.4

[1] January 1959=100

[2] January 1958=100

Source: U.S. Department of Labor, Bureau of Labor Statistics (*53*). Data for 1929–49 in *The Demand and Price Situation for Forest Products, 1964*, table 10.

TABLE 15.—*Wholesale price indexes for all commodities, and selected materials used in construction and shipping, 1950–66*[1]

[1957–59 = 100]

Year	All commodities	Lumber		Softwood plywood		Hardwood plywood		Insulation board		Container board		Structural steel		Structural clay products[1]		Portland cement		Construction materials	
		Actual	relative[2]	Actual	relative[2]	Actual	relative[2]	Actual	relative[2]	Actual	relative[2]	Actual	relative[2]	Actual	relative[2]	Actual	relative[2]	Actual	relative[2]
1950	86.8	93.9	108.2	121.5	140.0	96.7	111.4	74.8	85.6	82.2	94.7	62.3	71.8	71.7	82.6	72.1	83.1	83.0	95.6
1951	96.7	101.6	105.1	129.3	183.7	105.8	109.4	78.8	81.0	94.3	97.5	66.1	68.4	77.4	80.0	77.7	80.4	90.7	93.8
1952	94.0	99.0	105.3	117.3	125.3	96.6	102.8	79.7	84.8	92.5	98.4	67.5	71.8	77.8	82.8	77.7	82.7	89.6	95.3
1953	92.7	98.1	105.8	118.2	127.5	103.4	111.5	83.8	90.4	93.7	101.1	71.2	76.8	81.6	88.0	81.5	87.9	90.9	98.1
1954	92.9	96.4	103.8	114.4	123.1	95.7	103.0	88.2	94.9	95.9	103.2	74.1	79.8	84.9	91.4	84.4	90.8	91.1	98.1
1955	93.2	102.4	109.9	117.7	126.3	97.9	105.0	90.3	96.9	95.9	102.9	78.2	83.9	89.3	95.8	87.7	94.1	95.1	102.0
1956	96.2	104.6	108.7	107.7	112.0	99.9	103.8	94.5	98.2	98.9	102.8	83.9	87.2	94.3	98.0	93.2	96.9	99.0	102.9
1957	99.0	98.5	99.5	97.4	98.4	99.0	100.0	97.7	98.7	100.0	101.0	96.6	97.6	98.2	99.2	98.0	99.0	99.0	100.0
1958	100.4	97.0	96.6	98.1	97.7	99.7	99.3	99.8	99.4	100.0	99.6	100.6	100.2	99.8	99.4	100.5	100.1	98.9	98.5
1959	100.6	104.5	103.9	104.5	103.9	101.4	100.8	102.5	101.9	100.0	99.4	102.8	102.2	102.1	101.5	101.5	100.9	102.0	101.5
1960	100.7	99.9	99.1	92.9	92.3	102.8	102.1	102.2	101.5	99.6	98.9	102.8	102.1	103.1	102.4	103.5	102.8	100.5	99.8
1961	100.8	94.7	94.4	90.8	90.0	101.4	101.1	101.0	100.7	91.2	90.9	102.8	102.5	103.2	102.9	103.3	103.0	98.6	98.3
1962	100.6	96.5	95.9	87.8	86.8	97.8	97.2	94.5	93.9	92.4	91.8	102.8	102.2	103.5	102.9	103.1	102.5	98.3	97.7
1963	100.3	98.9	98.6	89.4	89.1	97.3	97.0	92.4	92.1	94.6	94.3	103.6	103.3	103.6	103.3	101.5	101.2	98.5	98.2
1964	100.5	100.7	100.2	86.7	86.3	98.5	98.0	90.4	90.0	97.5	97.0	105.9	105.4	104.2	103.9	101.0	100.5	99.6	99.1
1965	102.5	101.9	99.4	86.8	84.7	98.2	95.8	88.4	86.2	97.5	95.1	105.9	103.3	105.1	102.5	101.2	98.7	100.8	98.3
1966:																			
January	104.6	104.3	99.7	89.4	85.5	98.4	94.1	88.1	84.2	97.5	93.2	108.7	103.9	105.6	101.0	101.4	96.9	101.9	97.4
February	105.4	105.6	100.2	89.6	85.0	98.4	93.4	88.1	83.6	97.5	92.5	110.1	104.5	105.8	100.4	101.6	96.4	102.4	97.2
March	105.4	107.4	101.9	95.9	91.0	98.4	93.4	88.1	83.6	97.5	92.5	110.1	104.5	105.9	100.5	101.6	96.4	103.2	97.9
April	105.5	110.9	105.1	103.3	97.9	99.0	93.8	88.1	83.5	97.5	92.4	110.1	104.4	106.0	100.5	101.6	96.3	104.3	98.9
May	105.6	113.1	107.1	99.6	94.3	99.2	93.9	88.0	83.3	97.5	92.3	110.1	104.3	106.3	100.7	101.6	96.2	105.1	99.5
June	105.7	112.1	106.1	88.6	83.8	99.2	93.9	88.1	83.3	97.5	92.2	110.1	104.2	106.5	100.8	101.5	96.0	104.8	99.1
July	106.4	110.3	103.7	84.7	79.6	99.2	93.2	88.7	83.4	97.5	91.6	110.1	103.5	106.5	100.1	101.5	95.4	104.6	98.3
August[3]	106.8	109.9	102.9	82.2	77.0	99.2	92.9	89.0	83.3	97.5	91.3	110.1	103.1	106.6	99.8	101.5	95.0	104.5	97.8

[1] Formerly listed as "Brick and tile" by the U.S. Department of Labor.

[2] Derived by dividing the "Actual" price index by the "All commodities" price index.

[3] Preliminary.

Source: U.S. Department of Labor, Bureau of Labor Statistics (*53*). Data for 1929–49 in *The Demand and Price Situation for Forest Products, 1964*, table 10.

TABLE 16.—*United States imports of lumber, by softwoods and hardwoods and country of origin, 1950–65*[1]

[Million board feet]

Year	All species[2]				Softwoods				Hardwoods			
	Total	Canada	Mexico	Other	Total[3]	Canada[3]	Mexico	Other	Total	Canada	Mexico	Other
1950	8,423.5	3,102.2	208.0	113.3	3,140.2	2,899.5	191.4	49.3	283.2	202.7	16.6	64.0
1951	2,511.6	2,240.8	185.5	135.8	2,250.0	2,080.2	119.0	50.8	261.6	160.1	16.5	84.9
1952	2,481.6	2,257.7	106.0	117.9	2,266.9	2,139.9	92.1	85.0	214.7	117.9	13.9	82.9
1953	2,759.4	2,541.2	83.8	134.3	2,526.8	2,409.6	73.0	44.2	232.6	131.7	10.9	90.1
1954	8,063.1	2,844.1	80.0	189.0	2,854.6	2,747.7	74.5	82.4	208.5	96.4	5.5	106.6
1955	3,598.0	8,349.7	75.8	168.1	3,326.8	3,225.9	69.7	81.2	266.3	123.8	5.6	136.9
1956	8,404.5	3,168.3	51.6	184.6	3,131.0	3,060.7	47.8	22.5	273.5	107.6	8.8	162.1
1957	2,958.0	2,754.0	53.0	150.9	2,711.9	2,644.7	48.2	19.0	246.1	109.3	4.8	132.0
1958	3,389.6	3,177.8	49.3	162.5	3,154.5	3,083.0	45.1	21.4	235.1	89.7	4.3	141.1
1959	4,063.6	3,785.9	53.1	224.6	3,741.5	3,661.7	49.7	80.2	322.0	124.2	8.4	194.4
1960	8,930.6	3,693.9	41.6	195.1	3,639.3	3,576.1	86.9	26.4	291.2	117.8	4.7	168.7
1961	4,257.9	4,042.6	48.5	166.8	4,013.4	3,943.4	43.7	26.8	244.5	99.2	4.8	140.5
1962	4,892.9	4,637.7	47.8	207.4	4,583.7	4,507.1	40.4	86.2	309.2	130.6	7.4	171.2
1963	5,335.4	5,104.7	28.6	202.0	5,032.0	4,975.6	24.4	32.0	303.3	129.1	4.3	170.0
1964	5,222.6	5,004.1	10.2	208.4	4,917.5	4,872.0	7.0	88.5	305.1	132.0	3.1	169.9
1965	5,232.5	5,016.6	10.1	205.8	4,898.1	4,855.7	8.1	84.8	334.3	160.9	2.0	171.4

[1] Data may not add to totals because of rounding.

[2] Excludes mixed species (not classified as softwoods or hardwoods) for the years 1950–59.

[3] Includes small volumes of hardwoods for the years 1960–65.

Source: 1950–59 National Forest Products Association; 1960–65, U.S. Department of Agriculture, Forest Service, reporting statistics published by U.S. Department of Commerce, Bureau of the Census (*45*). Data for selected years 1929–49 in *The Demand and Price Situation for Forest Products, 1964*, table 11.

TABLE 17.—*United States exports of lumber, by softwoods and hardwoods and country of destination, 1950–65* [1]

[Million board feet]

Year	All species [2]					Softwoods					Hardwoods				
	Total	Canada	Europe [3]	Central [4] and South America	Other	Total	Canada	Europe [3]	Central [4] and South America	Other	Total	Canada	Europe [3]	Central [4] and South America	Other
1950	517.7	88.6	123.5	145.7	159.9	406.8	41.7	83.1	136.8	145.2	110.9	46.9	40.4	8.9	14.7
1951	997.6	134.5	366.5	176.0	320.7	875.7	71.4	324.2	164.6	315.4	121.9	63.1	42.2	11.3	5.3
1952	727.3	168.6	171.8	165.3	221.7	565.7	84.7	109.4	155.3	216.2	161.6	83.8	62.3	10.0	5.5
1953	643.1	161.2	93.6	144.6	243.7	512.6	75.8	71.2	136.8	228.8	130.5	85.5	22.3	7.8	14.9
1954	718.0	161.1	116.3	147.5	293.2	584.7	86.3	97.4	139.3	261.8	133.3	74.9	18.9	8.2	31.3
1955	841.0	218.7	145.3	173.3	303.8	652.4	119.1	95.8	147.6	289.9	188.6	99.6	49.5	25.7	13.9
1956	761.3	268.6	133.5	164.2	195.1	570.7	158.9	85.8	136.6	189.4	190.5	109.7	47.6	27.5	5.7
1957	811.1	237.4	122.8	171.5	279.4	623.4	138.6	88.1	148.8	247.9	187.7	98.8	34.7	22.7	31.5
1958	727.2	262.1	105.2	124.3	235.6	550.1	154.8	64.5	113.2	217.6	177.1	107.3	40.7	11.1	18.0
1959	787.3	333.6	98.3	120.3	235.0	607.9	198.5	80.5	104.2	224.8	179.4	135.1	17.9	16.2	10.2
1960	860.7	252.9	162.9	118.5	326.4	693.8	144.7	134.6	101.2	313.4	166.9	108.2	28.4	17.4	12.9
1961	773.1	232.5	152.7	87.4	300.6	618.2	150.2	108.4	80.3	279.3	154.9	82.3	44.3	7.0	21.3
1962	759.7	196.9	172.0	103.7	287.0	628.6	119.3	142.3	95.6	271.4	131.1	77.6	29.7	8.1	15.7
1963	877.5	186.1	232.0	98.6	360.9	743.1	107.9	198.9	92.0	344.2	134.4	78.1	33.1	6.5	16.7
1964	951.2	280.3	243.0	111.0	316.9	811.5	180.3	214.5	103.9	312.8	139.7	100.1	28.6	7.0	4.1
1965	922.5	289.5	249.4	118.8	264.8	782.3	188.4	229.3	104.8	259.8	140.2	101.1	20.1	14.0	5.0

[1] Data may not add to totals because of rounding.

[2] Excludes mixed species (not classified as softwoods or hardwoods) for the years 1950–59.

[3] Including the United Kingdom.

[4] Including Mexico.

Source: 1950–59 National Forest Products Association; 1960–65, U.S. Department of Agriculture, Forest Service, reporting statistics published by U.S. Department of Commerce, Bureau of the Census (*44*). Data for selected years 1929–49 in *The Demand and Price Situation for Forest Products, 1964*, table 12.

TABLE 18.—*Lumber* [1] *production in Canada, by softwoods and hardwoods, and region, 1950–65* [2]

[Billion board feet]

Year	All species	Softwoods					Hardwoods		
		Total	British Columbia [3]			Other Canada	Total	British Columbia	Other Canada
			Total	Coast	Interior				
1950	6.5	6.1	3.5	2.5	1.0	2.6	0.4		0.4
1951	6.9	6.4	3.7	2.5	1.2	2.7	.5		.5
1952	6.8	6.3	3.7	2.3	1.4	2.6	.5		.5
1953	7.3	6.8	4.1	2.6	1.5	2.7	.5		.5
1954	7.2	6.8	4.4	2.7	1.7	2.4	.4		.4
1955	7.9	7.5	5.0	2.8	2.2	2.6	.4		.4
1956	7.8	7.3	4.8	2.5	2.3	2.5	.5		.5
1957	7.1	6.7	4.4	2.3	2.1	2.2	.4		.4
1958	7.2	6.8	4.9	2.6	2.3	2.0	.4		.4
1959	7.6	7.2	4.9	2.3	2.6	2.3	.4		.4
1960	8.0	7.6	5.3	2.8	2.5	2.3	.4		.4
1961	8.2	7.8	5.6	3.0	2.7	2.2	.4		.4
1962	8.8	8.4	6.0	3.0	3.0	2.4	.4		.4
1963	9.3	8.8	6.4	3.2	3.2	2.4	.4		.4
1964	10.0	9.5	6.7	3.4	3.3	2.8	.5		.5
1965 [4]	10.0	9.5	6.9	3.6	3.3	2.6	.5		.5

[1] Does not include sawn ties.

[2] Data may not add to totals because of rounding.

[3] Includes small volumes of hardwoods.

[4] Preliminary estimates.

Source: Dominion Bureau of Statistics.

TABLE 19.—*Consumption of selected timber products and other materials used in construction, manufacturing, and shipping, 1950–65*

Year	Lumber						Softwood plywood		Hardwood plywood	
	Total		Softwoods		Hardwoods		Consumption	Index 1954=100	Consumption	Index 1954=100
	Consumption	Index 1954=100	Consumption	Index 1954=100	Consumption	Index 1954=100				
	Billion board feet		*Billion board feet*		*Billion board feet*		*Million sq. ft. (⅜-inch basis)*		*Million sq. ft. (surface measure)*	
1950	40.9	105.7	33.4	105.7	7.5	105.6	----------	-------	--------	-------
1951	38.7	100.0	30.9	97.8	7.8	109.9	2,995	75.2	1,537	85.3
1952	39.2	101.3	31.9	100.9	7.3	102.8	3,166	79.5	1,585	88.0
1953	38.9	100.5	31.6	100.0	7.3	102.8	3,838	96.4	1,725	95.8
1954	38.7	100.0	31.5	100.0	7.1	100.0	3,982	100.0	1,801	100.0
1955	40.1	103.6	32.5	102.8	7.6	107.0	5,276	132.5	2,285	126.9
1956	40.9	105.7	32.8	103.8	8.1	114.1	5,417	136.0	2,356	130.8
1957	35.0	90.4	29.2	92.4	5.8	81.7	5,638	141.6	2,287	127.0
1958	36.1	93.3	30.0	94.9	6.1	85.9	6,475	162.6	2,320	128.8
1959	40.5	104.7	33.7	106.3	6.8	95.8	7,664	192.5	2,977	165.3
1960	36.0	93.0	29.6	93.7	6.4	90.1	7,757	194.8	2,361	131.1
1961	35.5	91.7	29.5	93.4	6.0	84.5	8,495	213.3	2,649	147.0
1962	37.3	96.4	30.8	97.5	6.5	91.5	9,311	233.8	3,195	177.3
1963	39.2	101.3	31.8	100.6	7.3	102.8	10,367	260.3	3,521	195.6
1964[1]	40.8	105.4	33.4	105.7	7.4	104.2	11,432	287.1	4,050	224.9
1965[1]	41.2	106.5	33.3	105.4	7.9	111.3	12,375	310.8	4,425	245.7

Year	Insulation board		Container board		Portland cement		Structural steel		Brick	
	Consumption	Index 1954=100	Consumption	Index 1954=100	Shipments	Index 1954=100	Shipments	Index 1954=100	Shipments	Index 1954=100
	Thousand tons		*Thousand tons*		*Million barrels*		*Thousand tons*		*Million bricks*	
1950	826	83.2	5,771	91.0	228	82.9	----------	-------	6,486	97.4
1951	901	90.7	6,191	97.6	241	87.6	----------	-------	6,307	94.7
1952	886	89.2	5,678	89.6	251	91.3	2,664	84.9	5,642	84.8
1953	939	94.6	6,576	103.7	261	94.9	3,117	99.4	5,771	86.7
1954	993	100.0	6,340	100.0	275	100.0	3,136	100.0	6,657	100.0
1955	1,089	109.7	7,356	116.0	293	106.5	3,659	116.7	7,741	116.3
1956	1,091	109.9	7,562	119.3	309	112.4	3,780	120.5	7,382	110.9
1957	975	98.2	7,394	116.6	290	105.5	4,632	147.7	6,306	94.7
1958	1,052	105.9	7,331	115.6	307	111.6	4,147	132.2	6,255	94.0
1959	1,172	118.0	8,108	127.9	335	121.8	3,296	105.1	7,258	109.0
1960	1,096	110.4	8,240	130.0	312	113.5	3,865	123.2	6,502	97.7
1961	1,077	108.5	8,794	138.7	321	116.7	3,821	121.8	6,428	96.6
1962	1,079	108.7	9,454	149.1	332	120.7	3,861	123.1	6,913	103.8
1963	1,142	115.0	9,846	155.3	349	126.9	4,097	130.6	7,405	111.2
1964[1]	1,225	123.4	10,556	166.5	366	133.1	4,241	135.2	7,744	116.3
1965[1]	1,276	128.5	11,405	179.9	374	136.0	4,321	137.8	8,089	121.5

[1] Preliminary estimates.

Source: U.S. Departments of Commerce and Agriculture.

TABLE 20.—*Pulpwood consumption, production, net imports, and the equivalent wood volumes of the net imports of paper, board, and wood pulp, 1950–66* [1]

[Thousand cords]

Year	Total consumption	Consumption in U.S. mills							Net imports of paper, board, and wood pulp (pulpwood equivalent)
		Total	Domestic production					Net pulpwood imports	
			Total	Roundwood			Chipped residues		
				Total	Softwoods	Hardwoods			
1950	33,659	23,627	20,716	19,466	16,679	2,787	1,250	1,385	10,032
1951	36,158	26,522	25,128	23,718	20,069	3,649	1,410	2,497	9,636
1952	35,404	26,461	25,045	23,477	20,002	3,475	1,568	2,108	8,943
1953	37,774	28,141	26,322	24,787	20,707	4,080	1,535	1,541	9,633
1954	38,056	29,436	26,972	25,471	20,945	4,526	1,501	1,562	8,620
1955	41,989	33,356	30,948	28,598	23,363	5,234	2,350	1,704	8,633
1956	45,448	35,749	35,196	32,146	26,212	5,934	3,050	1,762	9,699
1957	44,241	35,746	34,422	30,676	24,601	6,075	3,746	1,666	8,495
1958	43,592	35,248	33,239	28,090	22,445	5,646	5,149	1,269	8,344
1959	47,895	38,691	36,716	30,583	23,380	7,202	6,134	1,055	9,204
1960	48,730	40,485	40,012	33,468	25,454	8,014	6,544	1,158	8,245
1961	50,316	42,191	40,272	32,118	23,997	8,121	8,155	1,162	8,125
1962	52,855	44,070	42,772	33,811	24,866	8,945	8,961	1,292	8,785
1963	54,610	46,435	44,708	34,471	25,044	9,426	10,237	1,543	8,175
1964	58,306	49,711	48,477	37,289	27,209	10,080	11,188	1,391	8,595
1965 [2]	60,330	50,740	49,900	38,000	28,100	9,900	11,900	1,149	9,590
1966 [2]	66,800	55,800	55,000	40,500	29,200	11,300	14,500	1,200	11,000

[1] Data may not add to totals because of changes in inventories, rounding, and statistical discrepancies in imports.

[2] Preliminary estimates.

Source: U.S. Department of Commerce, Bureau of the Census; U.S. Department of Agriculture, Forest Service; American Paper Institute; and American Pulpwood Association (*1, 3, 16, 41, 47, 54*). Data for selected years 1909–49 in *The Demand and Price Situation for Forest Products, 1964*, table 14.

TABLE 21.—*Pulpwood production, by section and by softwoods and hardwoods, 1950–66* [1]

[Million cords]

Year	All sections			North			South			West		
	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods	Total	Softwoods	Hardwoods	Total	Softwoods [2]	Hardwoods
1950	20.7	17.8	2.9	5.0	3.3	1.7	12.4	11.2	1.2	3.3	3.3	-----
1951	25.1	21.3	3.8	6.3	4.1	2.2	14.1	12.5	1.6	4.7	4.7	-----
1952	25.0	21.4	3.6	6.0	4.1	1.9	14.6	12.8	1.8	4.5	4.5	-----
1953	26.3	22.2	4.2	5.4	3.2	2.2	16.2	14.1	2.0	4.7	4.7	-----
1954	27.0	22.2	4.8	5.5	2.9	2.6	16.4	14.2	2.2	5.1	5.1	-----
1955	30.9	25.6	5.3	6.5	3.9	2.6	18.4	15.7	2.6	6.0	5.9	0.1
1956	35.2	29.1	6.1	7.4	4.4	3.0	20.3	17.4	2.9	7.5	7.3	.2
1957	34.4	28.2	6.2	7.3	4.3	3.0	19.8	16.8	3.0	7.4	7.2	.2
1958	33.2	27.3	5.9	6.2	3.6	2.6	20.2	17.1	3.1	6.8	6.6	.2
1959	36.7	29.1	7.6	6.6	3.3	3.3	22.8	18.7	4.0	7.4	7.1	.3
1960	40.0	31.5	8.5	7.9	4.2	3.7	23.6	19.1	4.5	8.5	8.2	.3
1961	40.3	31.5	8.8	7.2	3.6	3.6	24.2	19.4	4.9	8.9	8.5	.3
1962	42.8	33.0	9.8	7.8	4.0	3.8	25.6	20.0	5.6	9.4	9.0	.3
1963	44.7	34.2	10.5	8.0	3.9	4.1	26.6	20.7	5.9	10.1	9.6	.5
1964	48.5	37.2	11.2	8.6	4.3	4.3	28.8	22.5	6.4	11.1	10.5	.5
1965 [3]	49.9	38.7	11.2	7.8	4.1	3.7	30.8	23.8	7.0	11.3	10.8	.5
1966 [3]	55.0	42.0	13.0	8.7	4.3	4.4	33.8	25.8	8.0	12.5	11.9	.6

[1] Data may not add to totals because of rounding.

[2] Includes small volumes of hardwoods prior to 1955.

[3] Preliminary estimates.

Source: U.S. Department of Commerce, Bureau of the Census (*41*); U.S. Department of Agriculture, Forest Service (*29*). Data for selected years 1899–49 in *The Demand and Price Situation for Forest Products, 1964*, table 15.

TABLE 22.—*Pulpwood prices at local delivery points, 1950–66*

[Dollars per standard cord, including bark]

Year	New Hampshire	Southeast		Midsouth		
	Roundwood					Plant byproducts
	Spruce and fir	Southern pine	Hardwoods	Southern pine	Hardwoods	Southern pine
1950	11.00	11.90	--------	12.15	10.66	-------
1951	12.00	18.80	--------	14.26	18.00	-------
1952	15.50	18.90	--------	14.30	12.90	-------
1953	15.60	18.90	--------	14.26	12.80	-------
1954	18.25	14.00	--------	14.30	12.86	-------
1955	13.26	14.40	--------	14.60	12.90	-------
1956	13.60	16.40	--------	16.66	18.60	-------
1957	15.76	16.60	13.36	16.80	13.35	14.25
1958	16.00	15.60	13.45	16.30	13.10	14.80
1959	16.00	16.00	13.70	16.70	18.10	14.80
1960	16.00	16.45	13.60	16.06	13.10	14.40
1961	16.26	16.56	13.50	15.85	18.06	14.60
1962	16.60	16.66	13.40	16.80	13.20	14.60
1963	16.00	16.66	13.45	15.76	13.10	14.40
1964	16.00	17.00	13.60	15.90	13.16	14.80
1965	16.00	17.66	14.36	16.30	18.80	14.40
1966 [1]	15.60	17.75	14.60	17.00	14.50	16.00

[1] Preliminary estimates.

Source: Spruce and fir, University of New Hampshire, Extension Forestry Office (*6*); southern pine, hardwoods, and plant byproducts, U.S. Department of Agriculture, Forest Service (*27, 28*). Data for 1940–49 (except spruce and fir) in *The Demand and Price Situation for Forest Products, 1964*, table 16.

TABLE 23.—*United States imports and exports of plywood, by softwoods and hardwoods, 1950–65*

[Thousand square feet, surface measure]

Year	Imports					Exports		
	Total	Softwoods	Hardwoods			Total	Softwoods	Hardwoods [1]
			Total	Birch	Other [1]			
1950	63,362	96	63,267	61,221	12,047	3,816	8,279	637
1951	73,871	8,680	70,191	50,428	19,763	4,660	8,916	636
1952	86,500	629	84,971	62,171	22,800	13,461	13,096	366
1953	220,846	472	220,374	90,120	130,264	10,273	9,648	626
1954	484,472	482	434,040	110,149	323,891	7,335	6,682	658
1955	627,760	124	627,636	166,579	471,067	10,362	8,121	2,281
1956	706,624	--------	706,524	146,292	560,232	16,096	14,745	1,361
1957	846,912	466	846,447	113,867	732,580	16,586	14,668	868
1958	911,861	2	911,859	97,728	813,631	14,044	11,800	2,244
1959	1,380,225	--------	1,830,226	136,838	1,193,387	76,113	71,864	3,249
1960	1,024,540	10,614	1,014,026	130,098	883,928	15,880	18,074	2,806
1961	1,110,169	12,726	1,097,444	131,726	965,718	17,235	18,706	3,630
1962	1,451,711	12,805	1,438,906	161,434	1,277,472	19,151	16,669	2,482
1963	1,630,483	9,814	1,620,669	196,801	1,428,868	19,094	17,626	1,669
1964	1,952,023	4,865	1,947,168	227,283	1,719,885	81,057	28,238	2,824
1965	2,137,712	4,850	2,132,862	269,928	1,862,934	37,667	30,258	7,409

[1] Includes mixed species (not classified as softwoods or hardwoods).

Source: U.S. Department of Commerce, Bureau of the Census (*44, 45*).

TABLE 24.—*United States imports and exports of veneer, by kind, 1950–65*

[Thousand square feet, surface measure]

Year	Imports			Exports		
	Total	Birch or maple	Other	Total	Fancy, face, figured, and special	Utility, commercial, and container
1950	361,930	161,852	200,078	84,518	20,780	13,788
1951	443,232	177,486	265,746	40,621	22,139	18,482
1952	428,000	253,304	174,696	30,689	19,080	11,609
1953	583,517	335,607	247,910	49,147	31,900	17,247
1954	584,205	312,215	271,990	43,292	27,753	15,539
1955	765,373	328,980	436,393	51,736	28,608	23,128
1956	729,149	377,330	351,819	51,526	32,343	19,183
1957	502,788	316,877	185,911	51,916	34,246	17,670
1958	650,431	376,499	273,932	60,703	37,896	22,807
1959	1,063,981	496,500	567,481	66,115	37,764	28,351
1960	877,997	463,638	414,359	60,173	80,541	29,632
1961	943,415	514,702	428,713	58,075	29,252	28,823
1962	1,276,113	624,376	651,737	64,804	31,122	33,682
1963	1,467,726	664,614	803,112	79,102	43,452	35,650
1964	1,736,767	751,837	984,930	144,345	78,885	65,460
1965	1,958,194	817,401	1,140,793	[1] 169,810	98,924	44,744

[1] Includes 26,142 thousand square feet of softwood veneers not shown separately by kind.

Source: U.S. Department of Commerce, Bureau of the Census (*44, 45*).

TABLE 25.—*United States imports of hardwood [1] plywood, by country of origin, 1950–65 [2]*

[Million square feet, surface measure]

Year	Total	Canada	Latin America				Asia				Africa	Europe	Other
			Total	Mexico	Central America and West Indies	South America	Total	Japan	Philippines	Other Asia			
1950	63.3	50.0	6.3	0.8	-------	5.5	5.4	5.1	0.3	-------	-------	1.5	------
1951	70.2	47.2	5.6	.7	0.1	4.8	13.1	12.9	.1	0.1	0.4	3.8	------
1952	85.0	57.1	3.7	.9	.1	2.6	17.6	17.3	.1	.1	.6	6.0	------
1953	220.4	50.8	8.6	2.1	1.9	4.5	106.3	105.0	.5	.8	3.6	51.0	------
1954	434.0	71.1	8.0	3.4	.2	4.4	291.8	289.0	1.5	1.2	5.3	51.7	6.2
1955	627.6	99.3	8.8	3.6	1.4	3.9	439.2	428.6	9.8	.8	10.9	62.5	6.9
1956	706.5	81.2	5.3	.4	1.0	3.9	543.5	527.2	14.9	1.4	13.8	53.4	9.3
1957	846.4	64.4	9.2	1.8	1.9	5.6	717.6	679.8	33.2	4.6	11.0	40.4	3.9
1958	911.4	42.4	11.9	6.0	.6	5.8	794.3	669.6	97.4	27.3	15.6	46.3	.9
1959	1,330.2	60.2	32.1	8.6	4.4	19.1	1,083.0	810.9	213.6	58.5	25.8	125.1	4.0
1960	1,014.0	48.0	18.8	2.5	1.8	9.5	857.1	688.3	118.8	50.0	16.7	83.2	.2
1961	1,097.4	42.1	17.7	1.4	2.5	13.9	962.0	660.5	153.4	148.2	14.6	58.6	2.4
1962	1,438.9	56.6	15.7	1.8	.7	13.7	1,268.8	740.3	214.4	814.1	13.8	83.7	.4
1963	1,620.7	71.9	18.8	1.2	1.2	16.4	1,428.4	739.8	246.7	442.0	9.1	92.5	------
1964	1,947.2	68.1	13.7	.2	2.2	11.3	1,747.2	680.5	355.7	[3] 711.0	9.3	108.8	------
1965	2,132.9	64.5	10.9	(4)	(4)	10.8	1 932.3	768.0	307.8	[5] 856.6	6.8	118.3	------

[1] Includes mixed species (not classified as hardwoods or softwoods).

[2] Data may not add to totals because of rounding.

[3] Includes 461 million square feet from Taiwan and 206 million square feet from Korea.

[4] Less than 50 thousand square feet.

[5] Includes 468 million square feet from Taiwan and 337 million square feet from Korea.

Source: U.S. Department of Commerce, Bureau of the Census (*45*).

TABLE 26.—*United States imports of hardwood*[1] *veneer, by country of origin, 1950–65*[2]

[Million square feet, surface measure]

Year	Total	Canada	Latin America				Asia				Africa	Europe	Other
			Total	Mexico	Central America and West Indies	South America	Total	Japan	Philippines	Other Asia			
1950	361.9	348.5	2.3	----------	2.3	----------	0.6	0.5	0.1	----------	8.4	7.1	0.1
1951	443.2	396.5	8.2	----------	7.6	0.6	2.0	2.0	----------	----------	81.8	4.6	.1
1952	428.0	402.4	6.0	0.8	5.6	.1	.9	.6	.8	----------	15.8	2.9	------
1953	583.5	511.6	1.0	----------	1.0	----------	21.3	.3	21.0	----------	45.0	4.4	.1
1954	584.2	524.1	2.5	2.1	.4	----------	29.0	.8	28.6	0.1	24.2	8.1	1.2
1955	765.4	674.6	6.9	6.1	.8	----------	51.2	.3	49.7	1.2	29.0	2.8	.9
1956	729.1	621.0	7.7	7.3	.4	----------	56.2	3.3	51.4	1.5	88.9	5.8	------
1957	502.8	373.7	,9.3	4.8	4.4	----------	77.2	7.4	69.5	.3	87.8	4.7	.1
1958	650.4	455.6	7.4	1.8	5.9	.2	153.4	82.2	70.7	.5	29.5	4.3	.2
1959	1,064.0	559.9	21.1	4.8	6.5	10.3	399.8	225.4	174.1	.8	57.7	25.5	.1
1960	840.8	472.3	22.3	5.2	5.9	11.3	225.2	19.9	205.0	.3	98.1	22.8	.1
1961	894.8	515.9	27.6	5.8	8.8	13.0	237.0	8.6	223.7	4.7	96.0	18.2	.1
1962	1,232.2	638.4	42.7	3.5	16.9	22.3	338.4	5.7	295.6	37.1	168.7	44.0	.1
1963	1,397.9	684.6	63.1	1.7	14.3	47.2	455.2	4.0	391.0	60.1	146.9	48.2	------
1964	1,708.3	781.3	69.8	.7	21.8	47.8	664.4	2.1	557.2	105.2	158.8	83.8	.2
1965	1,871.2	852.0	67.2	.1	19.2	47.8	687.0	4.8	527.0	155.2	219.8	44.8	.9

[1] Includes mixed species (not classified as hardwoods or softwoods) for the years 1950–59.

[2] Data may not add to totals because of rounding.

Source: U.S. Department of Commerce, Bureau of the Census (*45*).

TABLE 27.—*Production*[1] *of veneer logs, by softwoods and hardwoods, 1951–66*

[Million board feet, local log rule]

Year	All species	Softwoods	Hardwoods	Year	All species	Softwoods	Hardwoods
1951	2,271	1,232	1,039	1959	4,350	8,488	862
1952	2,467	1,548	919	1960	4,276	3,446	880
1953	2,812	1,861	951	1961	4,628	8,836	792
1954	2,846	1,978	868	1962	4,854	4,068	786
1955	3,433	2,431	1,002	1963	5,808	4,530	778
1956	8,513	2,493	1,020	1964	5,830	5,005	825
1957	3,332	2,455	877	1965[2]	6,280	5,405	875
1958	3,713	2,884	829	1966[2]	6,650	5,725	925

[1] Includes small volumes of imported logs.

[2] Preliminary estimates.

Source: U.S. Department of Commerce, Bureau of the Census (*39, 42*); U.S. Department of Agriculture, Forest Service. Data for selected years 1905–47 in *The Demand and Price Situation for Forest Products, 1964*, table 18.

TABLE 28.—*Rosin and turpentine: Supplies, requirements, and prices, for crop year beginning April 1, 1958–66*

[ROSIN (520-lb. drums)]

Crop year beginning April 1	Source	Supply				Requirements			Carry-out stocks [1]	Average price
		Carry-in stocks [1]	Production	Imports	Total supply	Domestic	Export	Total		
										Dollars per cwt.[2]
	Gum	559,450	369,350	600	929,400	278,430	101,630	380,060	549,340	8.33
	Steam distilled wood	70,740	1,182,620	0	1,253,360	845,880	342,870	1,188,750	64,610	
	Tall oil	38,660	305,060	0	343,720	252,220	64,450	316,670	27,050	
1958	Total	668,850	1,857,030	600	2,526,480	1,376,530	508,950	1,885,480	641,000	
	Gum	549,340	334,110	2,110	885,560	408,420	305,620	714,040	171,520	9.59
	Steam distilled wood	64,610	1,198,690	0	1,263,300	811,840	396,550	1,208,390	54,910	
	Tall oil	27,050	382,970	0	410,020	305,480	79,840	385,320	24,700	
1959	Total	641,000	1,915,770	2,110	2,558,880	1,525,740	782,010	2,307,750	251,130	
	Gum	171,520	370,150	350	542,020	262,110	156,720	418,830	123,190	14.52
	Steam distilled wood	54,900	1,219,850	0	1,274,750	756,560	373,490	1,130,050	144,700	
	Tall oil	24,700	419,960	0	444,660	303,490	97,380	400,870	43,790	
1960	Total	251,120	2,009,960	350	2,261,430	1,322.160	627,590	1,949,750	311,680	
	Gum	123,190	474,500	[3]420	598,110	265,560	153,310	418,870	179,240	11.95
	Steam distilled wood	144,700	1,105,410	[3]3,000	1,253,110	778,530	316,680	1,095,210	157,900	
	Tall oil	43,790	471,150	0	514,940	318,580	73,220	391,800	123,140	
1961	Total	811,680	2,051,060	3,420	2,366,160	1,362,670	543,210	1,905,880	460,280	
	Gum	179,240	492,890	[3]500	672,630	225,380	91,050	316,430	356,200	11.05
	Steam distilled wood	157,900	1,093,770	[3]8,680	1,260,350	741,150	344,110	1,085,260	175,090	
	Tall oil	123,140	477,600	0	600,740	358,880	83,930	442,810	157,930	
1962	Total	460,280	2,064,260	9,180	2,533,720	1,325,410	519,090	1,844,500	689,220	
	Gum	356,200	458,960	2,112	817,272	184,502	64,700	249,202	568,070	11.00
	Steam distilled wood	175,090	1,098,050	(7)	1,273,140	743,980	318,560	1,062,540	210,600	
	Tall oil	157,930	527,930	(7)	685,860	420,530	101,290	521,820	164,040	
1963	Total	689,220	2,084,940	2,112	2,776,272	1,349,012	484,550	1,833,562	942,710	
	Gum	568,070	392,600	4,250	964,920	173,640	54,120	227,760	737,160	11.02
	Steam distilled wood	210,600	1,036,370	(7)	1,246,970	743,570	329,790	1,073,360	173,610	
	Tall oil	164,040	586,040	(7)	750,080	477,600	100,490	578,090	171,990	
1964	Total	942,710	2,015,010	4,250	2,961,970	1,394,810	484,400	1,879,210	1,082,760	
	Gum	737,160	361,310	670	1,099,140	157,760	80,530	238,290	860,850	10.36
	Steam distilled wood	173,610	1,079,560	(7)	1,253,170	737,630	327,520	1,065,150	188,020	
	Tall oil	171,990	626,400	(7)	798,390	480,300	132,480	612,780	185,610	
1965	Total	1,082,760	2,067,270	670	3,150,700	1,375,690	540,530	1,916,220	1,234,480	
	Gum	861,000	270,000	2,000	1,133,000	175,000	125,000	300,000	833,000	
	Steam distilled wood	188,000	980,000	(7)	1,168,000	740,000	300,000	1,040,000	128,000	
	Tall oil	185,000	675,000	(7)	860,000	500,000	220,000	720,000	140,000	
1966 [8]	Total	1,234,000	1,925,000	2,000	3,161,000	1,415,000	645,000	2,060,000	1,101,000	

See footnotes at end of table.

TABLE 28.—*Rosin and turpentine: Supplies, requirements, and prices, for crop year beginning April 1, 1958–66*—Continued

[TURPENTINE (50-gal. bbls.)]

Crop year beginning April 1	Source	Supply				Requirements			Carry-out stocks [1]	Average price
		Carry-in stocks [1]	Production	Imports	Total supply	Domestic	Export	Total		
										Dollars per gal.[4]
	Gum	42,880	120,300	22,150	185,330	121,900	80,100	152,000	33,330	0.513
	Steam distilled wood	[5]69,000	172,600	0	241,600	153,870	25,730	179,600	[5]62,000	
	Sulfate	[5]39,220	315,340	0	354,560	299,310	16,680	315,990	[5]88,570	
1958	Total	151,100	608,240	22,150	781,490	575,080	72,510	647,590	133,900	
	Gum	33,380	107,400	15,440	156,170	94,250	28,970	123,220	32,950	.584
	Steam distilled wood	[5]62,000	175,950	0	237,950	116,460	21,490	187,950	[5]100,000	
	Sulfate	[5]38,570	353,400	0	391,970	318,020	11,420	829,440	[5]62,580	
1959	Total	133,900	636,750	15,440	786,090	528,730	61,880	590,610	195,480	
	Gum	32,950	118,950	15,570	167,470	92,150	23,200	115,350	52,120	.479
	Steam distilled wood	[5]100,000	162,880	0	262,880	136,990	27,890	164,880	[5]98,000	
	Sulfate	[5]62,530	322,940	0	385,470	293,630	30,660	324,290	[5]61,180	
1960	Total	195,480	604,770	15,570	815,820	522,770	81,750	604,520	211,300	
	Gum	52,120	152,810	15,220	220,150	107,960	47,120	155,080	65,070	.245
	Steam distilled wood	[5]98,000	151,470	0	249,470	154,710	23,720	178,430	[5]71,040	
	Sulfate	[5]61,180	332,830	0	394,010	283,260	11,370	294,630	[5]99,880	
1961	Total	211,300	637,110	15,220	863,630	545,930	82,210	628,140	235,490	
	Gum	65,070	152,100	12,910	230,080	102,780	58,320	161,100	68,980	.201
	Steam distilled wood	[5]71,040	152,610	0	223,650	[6]131,920	26,420	158,340	65,310	
	Sulfate	[5]99,380	348,350	0	447,730	[6]333,560	15,630	349,190	98,540	
1962	Total	235,490	653,060	12,910	901,460	568,260	100,370	668,630	232,830	
	Gum	68,980	140,520	13,900	223,400	99,230	91,820	191,050	32,350	.339
	Steam distilled wood	65,310	157,480	0	222,790	117,700	40,000	157,700	65,090	
	Sulfate	98,540	375,530	0	474,070	344,000	31,450	375,450	98,620	
1963	Total	232,830	673,530	13,900	920,260	560,930	163,270	724,200	196,060	
	Gum	32,350	119,580	23,090	175,020	101,230	47,200	148,430	26,590	.450
	Steam distilled wood	65,090	157,450	0	222,540	157,440	25,400	182,840	89,700	
	Sulfate	98,620	402,070	0	500,690	417,440	12,300	429,740	70,950	
1964	Total	196,060	679,100	23,090	898,250	676,110	84,900	761,010	137,240	
	Gum	26,590	111,370	18,010	155,970	105,650	21,510	127,160	28,810	.555
	Steam distilled wood	39,700	168,630	0	208,330	153,660	17,010	170,670	37,660	
	Sulfate	70,950	420,660	0	491,610	403,850	6,600	410,450	81,160	
1965	Total	137,240	700,660	18,010	855,910	663,160	45,120	708,280	147,630	
	Gum	29,000	84,000	20,000	133,000	85,000	22,000	107,000	26,000	
	Steam distilled wood	38,000	150,000	0	188,000	130,000	15,000	145,000	43,000	
	Sulfate	81,000	445,000	0	526,000	435,000	5,000	440,000	86,000	
1966 [8]	Total	148,000	679,000	20,000	847,000	650,000	42,000	692,000	155,000	

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[1] These are gross stocks, including quantities sold and awaiting shipment. They include price-support stocks.

[2] Price in drums f.o.b. production points.

[3] Estimated allocation, as between SD and gum rosin, of total rosin imports reported by Bureau of the Census.

[4] F.o.b. tank cars at production points.

[5] Estimated allocation, as between SD and sulfate turpentine stocks, of *total* wood turpentine stocks reported by Crop Reporting Board.

[6] Estimated allocation, as between SD and sulfate turpentine consumption, of total apparent consumption of wood turpentine reported by Crop Reporting Board.

[7] Included under gum, if any.

[8] Preliminary estimates.

Source: Reports of Crop Reporting Board, and Agricultural Stabilization and Conservation Service, USDA, and Bureau of the Census, U.S. Department of Commerce.

TABLE 29.—*Production of rosin and turpentine by specified countries, average 1956–60 and annually 1961–66*

Commodity and country	1956–60 average	1961	1962	1963	1964	1965	1966[*]
	ROSIN (Thousand drums of 520 pounds net)						
United States[1]	1,928	2,051	2,064	2,085	2,015	2,067	1,925
China[2]	376	260	280	300	325	375	400
Finland and Sweden	40	60	70	80	90	100	115
France[3]	177	192	175	132	146	117	110
Greece	100	132	100	85	86	82	70
India	78	95	110	111	112	123	127
Mexico	140	184	206	195	170	150	150
Poland[2]	79	90	95	95	95	95	95
Portugal	221	320	279	261	318	309	290
Spain	137	172	178	138	142	125	120
U.S.S.R.[2]	496	580	600	625	650	675	700
Other[2 4]	99	144	85	80	90	110	120
TOTAL	8,871	4,250	4,242	4,187	4,239	4,328	4,222
	TURPENTINE (Thousand barrels of 50 gallons)						
United States[1]	624	637	653	674	679	701	679
China[2]	189	93	100	107	116	136	145
Finland	40	52	53	62	65	68	73
France[3]	69	74	67	51	56	45	48
Greece	38	50	38	34	33	31	27
India	25	28	31	31	30	35	36
Mexico	44	60	66	66	55	50	50
Poland	82	87	38	38	88	38	38
Portugal	78	107	88	85	103	103	96
Spain	56	71	74	55	59	51	49
Sweden	54	68	54	63	78	80	82
U.S.S.R.[2]	152	180	190	200	210	220	230
Other[2 4]	89	39	32	30	34	41	45
TOTAL	1,385	1,491	1,484	1,496	1,556	1,599	1,593

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[1] Crop years April 1 through March 31.

[2] Estimated.

[3] Crop years May 1 through April 30.

[4] Includes output in Albania, Austria, Bulgaria, Honduras, Hungary, Japan, Norway, Pakistan, and Yugoslavia.

[*] Preliminary estimates.

Sources: Official trade statistics, foreign trade sources, Bureau of Census Reports, U.S. Department of Commerce, and Foreign Agr. Service Dispatches and Crop Reporting Board, USDA.

TABLE 30.—*Rosin and turpentine: Foreign trade by leading exporting countries, average 1956–60, and annually 1961–65*

Commodity and country	1956–60 average	1961	1962	1963	1964	1965
	ROSIN (Thousand drums of 520 pounds net)					
United States	610	546	525	477	521	493
France	44	7	34	50	24	28
Greece	97	128	99	52	74	97
Mexico	75	120	148	172	185	125
Portugal	215	134	236	314	341	280
Spain	51	47	73	86	95	54
Other [1]	221	150	150	150	185	280
TOTAL	1,313	1,132	1,265	1,301	1,375	1,357
	TURPENTINE (Thousand barrels of 50 gallons)					
United States	84	76	106	145	114	43
Finland	13	22	24	30	31	34
Greece	18	9	18	(2)	(2)	1
Mexico	26	52	43	33	35	30
Portugal	52	74	54	65	55	62
Spain	5	1	(2)	(2)	1	(2)
Sweden	43	42	42	40	43	40
U.S.S.R.	62	62	60	55	55	30
Other [1]	35	23	30	35	45	90
TOTAL	338	361	377	403	334	330

[1] Mainly Mainland China, U.S.S.R., Sweden, and Finland. Estimated in part from importing country data.

[2] Less than 500 drums or barrels.

Source: Reports of Bureau of the Census, U.S. Dept. of Commerce; Foreign Agricultural Service, USDA; Naval stores trade sources, foreign official trade statistics.

☆ U.S. Government Printing Office: 1967—O 236-267